A Crosslinguistic Investigation into the Foreign Language Learning of (Non) equivalent Emotion Words – The Case of Kuwaiti Learners of English

Saba Tifooni

Thesis submitted for the degree of PhD

2016

Department of Linguistics
SOAS, University of London

Declaration for SOAS PhD thesis

I have read and understood regulation 17.9 of the Regulations for students of the SOAS, University of London concerning plagiarism. I undertake that all the material presented for examination is my own work and has not been written for me, in whole or in part, by any other person. I also undertake that any quotation or paraphrase from the published or unpublished work of another person has been duly acknowledged in the work, which I present for examination.

Signed:  Date: September 05, 2016

Acknowledgements

To finally end this journey with the chance to express my deepest gratitude to those who made this all a dream come true is a dream by itself.

First and foremost I would like to dedicate this research to my country, my home, my Kuwait. This is for you!

A most sincere and special thank you goes to my supervisor, Dr. Noriko Iwasaki. I am forever indebted to you. You have shown me such kindness, without your guidance, support, patience, motivation, and great knowledge I could not have produced and written this research. I cannot imagine having a better mentor during my PhD research. To my supporting supervisors, Dr. Chris Lucas, and Dr. Barbara Pizziconi, for your support and encouragement, for your insightful comments and feedback, I thank you from the bottom of my heart. I promised you at the beginning of this journey that I will make you proud, and I sincerely hope I have.

I would like to also thank Kuwait University for this opportunity, for believing in me and choosing me amongst many and granting me the scholarship that made this research possible. I would also like to especially thank our dearest head of department, a true father figure, and one of my biggest supporters, Dr. Hani Azer. I would also like to thank Dr. Mashael Al-Hamly for her support during my data collection in Kuwait. To the lecturers and professors at Kuwait University who have also aided my data collection process, thank you.

To my family, my life, the reason of my being. To my husband, Eyad, to the rock that made this dream a reality, a thank you is never enough to repay your sacrifices, your patience, your never failing encouragement, without your love and support I would have never started, and never had the heart to pull through, I love you. To my father, Baba Fadhel Tifooni, the many years you have dedicated to love and raise me, shape me, and push me to aim high have come to a fruitful end, I hope I made proud baba, I love you. To my mother, Mama Mai Al-Askari, you have shown me that love is a driving force, it was the fuel that kept me going, your countless prayers and loving encouragement provided light in the darkest of tunnels, I love you. To my siblings, you have all inspired me in one way or another, and I am forever grateful and proud to be your sister. To my sister Dr. Aisha, from whom I learned patience, faith, and perseverance, to my sister Arch. Awrad, from whom I learned passion, strength and rigor, and precision, to my sister Ghalia, from whom I learned persistence, dedication, and determination, to my sister Fouz, from whom I learned compassion, intelligence, and creativity, to my brother, Ahmed, from whom I also learned intelligence, willpower, and enthusiasm… I love you all. Thank you all for inspiring me and above all believing in me.
To my darling son, Sulaiman, for your dreams and your goals, work hard and persevere, there is nothing impossible if you work hard and believe in yourself, I believe in you.
To my friends and family, for your endless love and support, thank you… I love you.
Having this PhD journey come to an end is bittersweet… yet it opens exciting doors for more journeys to embark on.

Abstract

Can the learning of another language influence the way we interpret and describe emotional situations? Following previous research on emotions and crosslinguistic influence (Jarvis & Pavlenko 2010; Pavlenko 2002b; 2008d; 2014; Pavlenko & Driagina 2007), this thesis examines whether the learning of emotion words in English as a foreign language (L2) can influence the way Arabic speaking learners interpret emotions when there are no translation equivalents for a given emotional concept in their first language (L1). By examining English language learners from different foreign language learning contexts in Kuwait, i.e. immersion and non-immersion, this thesis examines whether the learning of another language might affect their lexical choices when describing the same emotional situation in their L1 Arabic. It also examines whether or not possible differences in their identification and expression of emotion in the two different languages can be attributed to crosslinguistic influence. This study focuses on the emotion words *excitement/excited/exciting* and *frustration/frustrated/frustrating*, as these emotions depicted by these English emotion words differ in the way they are encoded and conceptualized both in meaning and in emotional weight in Arabic. The study adopts multiple methodologies such as narrative elicitation via film recall as well as one-on-one interviews to supplement the data. The data revealed evidence of L2 influence on the types of emotion words used in the L1, as well as an L2 influence on the L1 descriptions of emotional states in the immersion learners' data. There was also an influence of the L1 on the use of L2 emotion words and descriptions of emotional states in the non-immersion learners' data. The results suggest that foreign language immersion contexts can facilitate the internalization of L2 conceptual emotion categories in nonequivalent and partially equivalent L2 emotion words.

Table of Contents

Attachments:
CD/DVD of video clips

Transcription Key

Transliteration	Value	Final	Medial	Initial	Isolated
CONSONANTS					
ʾ	/ʔ/	ـا	ـا	ا	ا
b	/b/	ـب	ـبـ	بـ	ب
t	/t/	ـت	ـتـ	تـ	ت
θ	/θ/	ـث	ـثـ	ثـ	ث
j	/dʒ/	ـج	ـجـ	جـ	ج
ḥ	/ħ/	ـح	ـحـ	حـ	ح
x	/x/	ـخ	ـخـ	خـ	خ
d	/d/	ـد	ـد	د	د
ð	/ð/	ـذ	ـذ	ذ	ذ
r	/r/	ـر	ـر	ر	ر
ṛ	/rˤ/	ـر	ـر	ر	ر
z	/z/	ـز	ـز	ز	ز
s	/s/	ـس	ـسـ	سـ	س
š	/ʃ/	ـش	ـشـ	شـ	ش
ṣ	/sˤ/	ـص	ـصـ	صـ	ص
ḍ	/dˤ/	ـض	ـضـ	ضـ	ض
ṭ	/tˤ/	ـط	ـطـ	طـ	ط
ẓ	/ðˤ/	ـظ	ـظـ	ظـ	ظ
ʿ	/ʕ/	ـع	ـعـ	عـ	ع
ɣ	/ɣ/	ـغ	ـغـ	غـ	غ
f	/f/	ـف	ـفـ	فـ	ف
q	/q/	ـق	ـقـ	قـ	ق
k	/k/	ـك	ـكـ	كـ	ك
l	/l/	ـل	ـلـ	لـ	ل
ḷ	/lˤ/	ـل	ـلـ	لـ	ل
m	/m/	ـم	ـمـ	مـ	م
n	/n/	ـن	ـنـ	نـ	ن
h	/h/	ـه	ـهـ	هـ	ه
w	/w/	ـو	ـو	و	و
y	/j/	ـي	ـيـ	يـ	ي
VOWELS					
ā	/aː/, /ɛː/, /æː/, /ɐː/, /ɑː/	ـا	ـا	ا	ا
ī	/iː/	ـي	ـيـ	يـ	ي
ū	/uː/	ـو	ـو	و	و
a	/a/, /ɛ/, /æ/, /ɐ/, /ɑ/				
i	/i/, /ɪ/				
u	/u/, /o/				
ē	/eː/	ـي	ـيـ	يـ	ي
ō	/oː/	ـو	ـو	و	و

Chapter 1: INTRODUCTION

1.1: Introduction

From the first cry at birth, we begin to convey our feelings of hunger, discomfort, and pain in order to express our needs of basic survival. These cries and wails later on develop into expressions of wonder, content, love, and joy in the midst of a warm, protective, and loving environment. As we grow and expand ourselves into bigger and more complex environments, these emotions develop into verbal expressions taking on linguistic modes in various forms and meanings for us to express and interact (Javier 2010). As social and psychological beings, emotions form an integral part of our daily lives, and these verbal expressions of emotions form an outlet of expression and communication as they help express our feelings, whether the positive or the negative, from the very beginning of our lives.

The verbal expression of our emotions brings forth the importance of studying emotions and emotion words in different languages as they might differ from one language to another. Not only that but also, studying the different expressions of emotions in different languages and the pedagogical complications that may rise due to the differences in these emotional expressions aids in understanding how that might affect the language learners. As an example, Dewaele (2010) reported struggling to express his emotions in Spanish when trying to master the language while attending University in Salamanca, for even his attempts at swearing sounded 'funny' to his Spanish friends. Dewaele also reported another incident where he missed a flight and felt he could not communicate his *anger* in Spanish; he felt he lacked the words and fluency to express his feelings even though he has been using his Spanish for the majority of his trip (2006).

> The communication of emotion in an LX can be particularly difficult because LX learners and users may not have the linguistic and pragmatic means to express the full range of their emotions in a way that would satisfy their communicative needs and be considered appropriate by their interlocutors (Dewaele 2010, p.6).

The reason that lies behind such difficulties is the differences in the cultural associations and different means of expressions between different languages. Previous studies on emotions have found that certain emotion words are only available in their respective languages and have no translation equivalents in others, and that there is no concept of a given emotion that is truly identical in another language due to its cultural associations and cultural teachings (Pavlenko 2005; Wierzbicka 1994). One might argue that most emotion words can be translated into other languages, and indeed that may be the case. However, even though these language specific emotion words may be linguistically translatable, culturally they prove much harder to translate (Panayiotou 2004a; 2006; Wierzbicka 1999).

A possible reason is that differences in languages may be linked to differences in people's cultures (Wierzbicka 1985; 1986a), and this in turn can be projected in how people think, feel, and act. Wierzbicka stated that '[D]ifferent languages are linked with different ways of thinking as well as different ways of feeling; they are linked with different attitudes, different ways of relating to people, different ways of expressing one's feelings' (2004, p.98). For example, previous research established that *frustration* may be specific to the English language and is consequently untranslatable into other languages (Panayiotou 2004a; Pavlenko 1999; 2002a; 2002b; 2005; 2008b; 2008d; 2009; 2014; Pavlenko & Driagina 2007).

This further brings forth the question as to whether or not other emotions that may be linguistically and culturally translatable and are regarded as universal and basic such as *happiness* or *anger* (Ekman 1992; 1999; 2004b) are the same experiences of *happiness* or *anger* and the same concepts as their supposed equivalents when compared between speakers of different languages. This question is the root of the debate around the nature of our emotions: are they natural and universal? Or are they specific to cultures and languages and are therefore learned concepts? Moreover, it also brings forth

another question as to whether or not there are emotions that are actually specific to a certain language/culture, or whether physiologically we all feel the same, and it is just the labels that differ from one language to another.

Language plays an integral and crucial part in our understanding of emotions and emotion expressions in our mother tongue, as well as emotions and emotion expressions in other languages. It is through language that we are able to study and understand our own emotions and the emotions of others and are therefore able to highlight the similarities and differences between emotions using the available emotion words and expressions that each language provides. Therefore, any research on emotions and emotion expressions has to seriously consider the issue of language when interpreting its results and answering its questions and look at language in an informed way and not by default (Harkins & Wierzbicka 2001), i.e. the assumption that emotion words in one language can be applied onto other languages. Thusly, this research mainly investigates whether language constrains the perception of emotions by comparing how language learners identify and use emotion words in their second/foreign language (L2) as opposed to their native tongue.

1.2: An emotional experience

An emotional experience can be defined as a complex cognitive, cultural, psychological, physiological, biological, social, and linguistic experience (Russell 1980; 2009; Scherer 2005; 2009a; 2009b). It is an automatic reaction that results from the cognitive evaluation of an external, at times even internal, trigger. In other words, an emotional experience is a thought about experience where one evaluates and makes sense of the situation in their minds according to the cultural and social categories and norms of any given emotion. Moreover, the biological hard wired responses and reactions available in our bodies to that emotion also play a part in our emotional experience. This emotional evaluation also entails processing the linguistic expressions available in our

minds that are at large made available by our cultures by encoding the emotional experience and mapping them into specific words. In short, an emotional experience can be defined as an experience that is greatly linked to our mental processes of thinking, our biological reactions to a given evaluated situation, and to the emotion words made available by different cultures through language.

Not only that but also, and according to Wierzbicka, emotion is expressed at every level of language including grammar and intonation in addition to facial expressions and bodily gestures (1999, p.29). Therefore, this study presumes that emotions, although a subjective experience, may be culture specific and this is reflected in the language of emotions or the verbal expressions used to express these specific emotions in any given language (Pavlenko 2002a; 2002b; 2008d; 2014; Pavlenko & Driagina 2007). Since emotions are reflected in the language of expression and in the emotional weight and conceptual meanings that are attached to a given emotion word, this provides insight on how different cultures via different languages express the same emotional experience differently. The study therefore investigates how these different linguistic expressions that refer to the same emotional experience may be affected by the learning of another language. Studying the differences of the linguistic expressions of emotions between L1 Kuwaiti Arabic and L2 English might provide insight to understanding whether or not emotional experiences shift and change when learning a new language in foreign language classrooms. The key constructs of emotion briefly defined here are further discussed in the following literature review chapter (Chapter 2).

1.3: Thought and language

Furthermore, the close relationship between thought, language, and emotion is the reason why this research bases its argument around the linguistic relativity hypothesis and the effects that language has on our thought, and in turn on our feelings. The linguistic relativity hypothesis that revolves around understanding the influence language

has on our thoughts poses extreme opposition from numerous scholars. This thesis will first briefly survey the literature behind this hypothesis in the literature review chapter (Chapter 2). Although this research mainly focuses on the crosslinguistic influence (CLI) hypothesis, linguistic relativity is first reviewed because of its influence on CLI in second language acquisition research. This research applies the crosslinguistic influence as its theoretical framework which focuses on the influence language learning has on the language learners' native language and/or vice versa, perhaps adding insight to the relativity hypothesis itself. This study aims to contribute not only to the relativity hypothesis, and to studies on emotions and emotion vocabulary between English and Kuwaiti Arabic, but also on a larger scale, helps to understand the language learner's mind. The study also aims to contribute to foreign language education on emotion words as this is an area that seems to need further support suggesting pedagogical implications due to the complex nature of emotion words (Dewaele 2005a; 2006).

1.4: (Non) equivalent emotion words in FL/L2 learning

In language teaching, there are psycholinguistic factors that may ease the learning of a novel word in the L2 such as having similar phonological features, semantic content, and word class to the first language (L1) translation equivalent, as well as the ease of the imageability of the concept, the frequency of the word, and word meaningfulness (Ellis & Beaton 1993). Additionally, most rely on the psycholinguistics of linking concepts, i.e. the linking of a new word to a previously existing one in the native language using its translation equivalent which 'commonly refers to the link between two or more words posited by dictionaries and glossaries' (Pavlenko 2008d, p.92). Not that this method is faulty per se, nonetheless, some fail to explain whether or not the paired translation equals or even compares to the word in question. Slobin stated that '[I]t is a psycholinguistic truism that the process of learning labels for categories first contributes to the formation of those categories, and then serves to make those categories more

salient' (2000, p.119). However, the linking of new concepts to previously existing ones may be a problematic one for the language learner when he/she is faced with words that may not be equivalent, or are only partially equivalent to their L1, or when faced with words that may not be as easily imagined and felt as is the case with emotion words that are abstract in nature and may be different from one language to another.

Furthermore, previous studies have found that bilinguals shift their emotion display when shifting language, as bilingual speakers claim to 'feel different' in their L2, or feel an emotion when using one language but not when using the other, or even feel an emotion when using one language to be stronger than when using the other (Dewaele 2006; 2008b; 2010; 2011; Koven 2006; Panayiotou 2004a; 2004b; Pavlenko 2005; 2006; Wierzbicka 2004). As an example of participants reporting feeling differently in their languages, Pavlenko in a joint study using a web questionnaire on emotions with Dewaele (Dewaele & Pavlenko 2001) asked their participants whether or not they feel like a different person when expressing emotions in their different languages. Results revealed that 69% of the respondents agreed that they feel like a different person, examples of their answers include:

> Absolutely. Speaking a different language means being a different person belonging to a different community character type emotional type. (Marina, 42, Russian-English-Hebrew-Ukrainian) (Pavlenko 2006, p.12)

> Absolutely. I feel I can hide my emotions and myself a lot better in English. In Spanish I feel a lot more 'naked'. (Dolores, 31, Spanish-English-German-French) (Pavlenko 2006, p.20)

Other participants also reported feeling more emotional in their L1 than in their L2, as the L1 feels more personal while the L2 is more detached and more distant (Dewaele 2006; Dewaele & Pavlenko 2002; Pavlenko 2002a; 2006). In fact, there are studies using a large database gathered from a web questionnaire and others using skin conductance responses to emotional stimuli that looked into emotion laden words, reprimands, swear and taboo words, as well as emotional expressions and found them to

be stronger when tested in the participants' L1 than when tested in their L2 (Caldwell-Harris & Ayçiçeği-Dinn 2009; 2014; Caldwell-Harris et al. 2011; Caldwell-Harris 2014; Dewaele 2004a; 2004b; 2005b; Harris et al. 2003; 2006). In addition, literary analysis of translingual memoirs and personal narratives revealed that bilingual writers feel differently when writing in their different languages, sometimes without being conscious about it (Besemeres 2006; 2011; Marian & Kaushanskaya 2008; Pavlenko 2006; 2014). This leads to the conclusion that 'the emotion concepts that are available to us contribute to how we interpret what we feel, how we experience it, even how we act on it' (Besemeres 2006, p.55).

Albeit an arguable conclusion, it would be interesting to see whether or not having a certain level of proficiency in the L2 affects how a person perceives and interprets certain emotion words in both the L1 and the L2, and how the context of learning plays a part in the interpretation of the emotional scenario. This study bases itself in different contexts of foreign language learning and focuses on emotion words that may be specific to the L2 English and addresses whether or not differences and/or possible shifts occur when using one language versus the other, and whether or not the exposure to an L2 changes one's perception and interpretation of emotions in the L1. It also inquires whether there occurs any restructuring of the emotion concept in question in the mental lexicon, which may be represented in an L2 influence on the L1. The study will look into how speakers of the two languages, Kuwaiti Arabic and English, describe the same emotional situation as well as interpret the facial expressions and emotional body language and how they will talk about this emotional experience in their native language as well as in their learned language.

Additionally, researchers inquired 'whether classroom instruction can lead to the acquisition of new concepts in the L2' (Dewaele 2008a, p.173) and in a study that looked into English specific concepts such as 'privacy' and 'personal space' that were taught in

formal language classrooms, it revealed that it was very hard for Russian students to grasp these concepts (Pavlenko 2002a; 2003a). By utilising Kuwaiti L2 learners of English from two different L2 English learning contexts in Kuwait, immersion and non-immersion, and comparing their perceptions of emotions in their L2 and in their L1, this study will look into how these learners perceive and interpret the English emotion words *excitement* and *frustration*. The main interest behind this study lies in finding out how Kuwaiti learners of English describe scenes of emotional experiences that English speakers often describe as *exciting* and as *frustrating*. Additionally, it aims to uncover whether or not having reached a level of language learning to a certain degree causes a possible shift in emotions or perhaps the perception of their own feelings. This study also aims to highlight the variables that aid the successful learning of emotion words by comparing their use of the emotion word that is specific to the language they are learning against one another as language learners and against native and monolingual speakers of the languages in focus. Through inspecting the possible variables that might affect the learning of such emotion words, this study also highlights the hardships these learners face when attempting to learn and understand an emotion word that may not have an equivalent in their L1. Possible pedagogical implications and suggestions might be pointed out that may not only apply to the languages in focus, but may be expanded onto others.

1.5: Structure of the thesis

This thesis will consist of a total of eight chapters. Following this introduction, Chapter 2 presents an overview of the definitions and theories of emotions, and then discusses emotions placed in the universal or culture specific debate to further understand what emotions are. This is then followed by the literature review that first discusses the linguistic relativity argument, which then introduces the idea behind crosslinguistic influence. It will then survey the studies on emotions under the linguistic relativity and

crosslinguistic influence hypothesis, the studies that focused on the psycholinguistic mental representation and access of the emotion words in the first language and the second language, and the possible variables that affect FL/L2 learning. Additionally, the chapter also discusses conceptual nonequivalences in emotion words and reviews the prominent studies that have been done so far. Chapter 3 will discuss the background to the present study and the rationale behind it in terms of setting, languages in focus, the learners in question, and concluding it by posing the research questions and hypotheses. Chapter 4 will be dedicated to the methodology. It will first discuss the target emotion words in focus for this research. Then the chapter will discuss the pilot study including its procedure, results, and discussion. After that, it will introduce the main methodology for the present study, which consists of a triangulation of approaches starting with a proficiency placement test, a biographical and linguistic background questionnaire, a narrative elicitation test, and is concluded with an interview. The chapter also discusses the participants as well as the analysis strategy used to analyse and make sense of the data collected. Chapters 5 and 6 will be dedicated to discussing the results of the emotion words *excitement* and *frustration* respectively by comparing the participants' responses in terms of conceptual equivalence of the emotion words with focus on the target words and their Arabic translation equivalents. Chapter 7 will provide the conclusion by discussing the results of the study, which will be critically assessed and scrutinized by comparing them with results from previous studies, and further discussing the issues that arise from the data analyses, and finally concluding with pedagogical implications as well as suggestions for future research.

Chapter 2: LITERATURE REVIEW

2.1: Introduction

This chapter will first commence with a brief review on the theories, approaches, and debates that revolve around understanding what an emotion is and how to tell different emotions apart in order to understand the different linguistic expressions and physiological manifestations that are associated with certain emotions. Four prominent approaches will first be discussed that aim to define what an emotion is, paving the way into discussing the universality or culture specificity debate to further understand what emotions essentially are and how language factors into their definition. This overview provides the working definition of emotions, which has guided the methodology I adopted for this study (discussed in Chapter 4), comparing how different language speakers and language learners use different emotion words in their different languages when describing the same emotional situations. This will aid in answering the main question that this study revolves around: whether or not language influences the way we perceive and express emotions, which will be manifested in the use of different linguistic emotional expressions.

The following section will discuss the effect of language and language learning on emotions by first reviewing and surveying the literature of linguistic relativity, which also looks at the relationship between thought and language, paving the way into introducing and discussing the crosslinguistic influence hypothesis. The chapter will then discuss in depth research done on the language of emotions, emotions and the body, the affective processing of emotion words, and the variables that affect L2 emotion word learning, which is what this current study is largely based on.

2.2: Defining emotions

What is an Emotion? A seemingly simple question, but not as simple to answer evident by the numerous theories and debates dating from the days of Plato and Aristotle until the present time. In the first part of this literature review I focus on the definition of emotion by reviewing the most prominent theories and definitions put forth by psychologists, biologists, philosophers, and anthropologists. Along with this survey, I will also review one of the most prominent debates/arguments that have surrounded this concept, namely: whether emotions are universal or specific to culture. This survey of the theories of emotions and looking into the universality and culture specificity debate will provide the working definition of emotion adopted for this study. To come to an understanding of what an emotion is, these different theories will each offer a different element of emotion to fully understand what they are.

Rather than summarizing the competing theories and definitions chronologically, this overview will summarize the most prominent definitions, whether classical or contemporary, according to the approaches they follow. Each theory discussed in this chapter offers an overall understanding of the elements that make up an emotion, and how these elements tie in with the mind, body, environmental stimuli, behavior, and essentially thought and language. Some of the major approaches are: the evolutionary approach, the physiological approach, the cognitive approach, and finally the social and cultural approach (for reviews see: Jenkins et al. 1998; Parrott 2001; Niedenthal et al. 2006; Oatley et al. 2006).

A: The Evolutionary Approach / Behavioral Approach

The theories that belong to the evolutionary approach state that emotions evolved and adapted over time. They also focus on how emotions are observed in our behavior. Although these theories mainly revolve around the universality of emotions, their descriptions and explanations of emotions as a natural behaviour contributes to the

definition of what an emotion is. Darwin (1998; 2003), one of the most influential theorists to write about emotion, saw that our emotional behavior is derived from our past as a basic need for survival and as we evolved, it became part of our biological beings, and is now part of our natural human behavior. Darwin also argued that our emotional behavior and reactions, such as facial expressions and bodily reactions, are dependent on the situational factor, whereby one feels *fear* when one encounters a dangerous situation. In *The Expression of Emotion in Man and Animals* in 1890 (1998; 2003), Darwin also offered descriptions of emotional facial expressions, and how these expressions are innate and embedded in our natural behavior. He regarded these emotional facial expressions as universal behavioral patterns, and disregarded the role of culture in shaping these emotions and facial expressions, regarding culture and language as mere vehicles that express these emotions (Darwin 1998; 2003; Jenkins et al. 1998; Niedenthal et al. 2006; Oatley et al. 2006). Darwin's theory greatly influenced numerous studies on emotions and research on emotional facial expressions.

Ekman and Izard (Ekman 1980; 1992; 2003; 2004a; 2004b; Ekman & Friesen 1969; 1971; 2003; Izard 2007; Niedenthal et al. 2006; Oatley et al. 2006) were the most prominent theorists to follow Darwin's footsteps in studying emotions and facial expressions. Along with Friesen, Ekman argued that there is indeed a set of 'basic' emotions evident from the similarities found in the facial expressions of these emotions. A 'basic' emotion is 'an emotion that can be identified in terms of a biologically based, evolutionary syndrome of neurological, hormonal, and muscular expression, especially facial expressions' (Ekman 2003, p.119). A 'basic' emotion is a separate discrete emotion that differs from others, as well as being evolved to adapt and serve fundamental functions (Ekman 1992). Basic emotions occur automatically, rapidly, and nonconsciously (Izard 2007, p.262). Ekman named six basic emotions: *happiness*, *sadness*, *anger*, *fear*, *surprise*, and *disgust* (Ekman 1980; 1992; 2004b; Ekman & Friesen

1971; 2003; Niedenthal et al. 2006). Ekman argued that there is evidence from scientific research of a distinctive pattern in our autonomic nervous system activity for some of these basic emotions, which is typically tested by measuring skin conductance responses, finger temperature, heart rate, and somatic activity (Ekman 1992; Levenson et al. 1990).

Ekman and his colleagues (Levenson et al. 1990) asked a number of participants to contract their facial muscles as directed by the researcher to portray the prototypical display of a certain emotion, and their autonomic nervous system activity was measured and recorded. Results revealed that the positive emotion *happy* is distinct from the negative ones, and there are some differences in the physiological reactions between *anger*, *fear*, *disgust*, and *sadness.* However, methodological issues seem to surface in this particular study. One issue is that these emotional reactions were registered from directed facial contractions rather than going through the actual emotional experience, even though self reports reported that this is what the participants felt. Nevertheless, Ekman (1992) later added that there is indeed a distinctive emotion-specific central nervous system activity for basic emotions.

As for research on facial expressions from different cultures, Ekman and Friesen (1969; 1971; 2003) relied on the judgment task performing various experiments, some of which included: showing their participants a set of pictures depicting certain facial expressions, giving their participants an emotional story and having the participants match the story to a picture of an emotional facial expression, asking the participants to display a given emotion on their faces, and measuring participants' skin resistance and heart rates when watching stress inducing films. They gathered data from different cultures, and although universals were found in terms of the six basic emotions that they studied, slight cultural differences have also been detected through inhibiting a certain facial expression, blending it with another, partial facial expressions, or the inability to distinguish an emotion from another. Ekman and Friesen have attributed these cultural

differences to the circumstances that elicit such emotions and the social governing rules that dictate how these emotions are displayed (Ekman 1980; Ekman & Friesen 1969; 1971; 2003; Oatley et al. 2006).

However, one of the major critiques regarding Ekman and Friesen's studies is that they controlled the study by giving their participants a number of words to choose from (Russell 1994). Therefore, researchers Haidt and Keltner (1999) repeated the study with a bigger range of emotion words including the six used in Ekman and Friesen's studies, and asked their participants to label fourteen emotions using their own words. Results revealed that there are some emotions that are more recognizable than others, and though the universality argument was enforced, cultural variations still occurred. Moreover, in Ekman and Friesen's (1971; 2003) study in Papua New Ginea, they used a translator to translate the test from the researchers to the participants and the other way around. There may have been assumptions put forth by the translator while translating the emotions, and perhaps link the emotions in question to their closest equivalents, which may not be the exact or accurate conveyor of the emotions tested. Although Ekman's and several other studies did show that universals may indeed be found in some emotions, there still exist variations and inhibitions that are mainly attributed to culture (Ekman 1980; Haidt & Keltner 1999; Russell 1994; Scherer & Wallbott 1994). Studies in this approach greatly contribute to the universal versus culture specificity of emotions debate, which will be discussed in further detail in the following section (2.2.1).

What we can infer from studies in this approach for the current study's working definition of emotion is that there are emotions that are displayed as facial expressions and as distinctive patterns in our autonomic nervous system, i.e. an understanding that emotions are innate and embedded in our natural behaviour and are manifested in automatic facial expressions and reactions in our nervous system. Research on theories in this approach also reveal another important element in the definition of emotions

especially when explaining facial expressions between different cultures, namely the cultural element, even though these theories advocate the universality of emotions. The evolutionary approach also links emotions to our biology, namely our bodies, and is somewhat related to theories in the physiological approach, described next.

B: The Physiological Approach

The physiological approach defines emotion according to the changes and reactions that occur in the body. In the title of his famous essay, which became one of the most influential theories of emotion, James (1884) asked: *What is an Emotion?* A question that remains, as of yet, widely debated, as is James's theory, as influential as it was. For James, '*the bodily changes follow directly the* PERCEPTION *of the exciting fact, and that our feeling of the same changes as they occur* IS *the emotion*' (italics and capitalization in the original) (1884, pp.189–190). So according to James, once a bodily reaction takes place (whether it is tears, rapid heart beating, facial expression, etc.) and is registered in the mind, this mental state is what makes the emotion. James provides an example of an event where if one encounters a bear, one's physiological reaction is what defines being *frightened*. So in the case of a bear encounter, one's bodily reaction might be to tremble, perspire, racing heartbeat, and one's instinct is to run away, and so this reaction is the emotion of *fear* (Oatley et al. 2006). One cannot feel *fear* or *anger* without the physiological reaction and bodily change taking place first. This theory, which later on becomes known as the James-Lange theory of emotions (Jenkins et al. 1998), focuses the definition of emotion on the physiological reaction it has on the body and how the mind comes to make sense of what is happening to the body. Most emotions do have an effect on the body, as most theories agree, whether it was the rapid heart beating, crying, trembling, and most obviously, facial expressions; however, having these reactions as the core of what defines an emotion does not offer a plausible definition or a comprehensive

one. The James-Lange theory allocates sets of reactions to certain emotions; for example, *sadness* is the result of crying, arguably, this does not define tears of joy for example.

Cannon (2003), a professor in physiology, was one of the most prominent figures that criticized the James-Lange theory. Using physiological experiments, as opposed to both James and Lange who did not base their theory on any experiment, Cannon confirmed the relation between emotion and the body. However, he concluded that emotions are not the perception of our physiological reactions, instead, our bodies react because we feel a certain emotion (Cannon 2003; Oatley et al. 2006). In other words, we feel emotion before our bodies react. In addition, in Cannon's *Bodily Changes in Pain, Hunger, Fear, and Rage* in 1929, he explained that the physiological changes that occur when emotionally stimulated (or not) namely 'acceleration of the heart, contraction of the arterioles, dilation of the bronchioles, increase of blood sugar, inhibition of activity of the digestive glands, inhibition of gastro-intestinal peristalsis, sweating, discharge of adrenin, widening of the pupils and erection of hairs' (2003, p.80) all occur as a unit at the same time for all emotions. This argument opposes the James-Lange theory in that each emotion does not have a clear cut distinguishable physiological reaction, and that, for example, *fear* and *anger* have the same or somewhat similar bodily reactions, hence these reactions do not define what each emotion is.

Whether it was James's or Cannon's theories that offered the most plausible definition of emotion, they both affirmed that emotions are strongly linked to our bodies, and influenced more current studies using modern technologies to study the link between emotions and the body. Current scientists have further provided evidence that emotions are indeed a biological element in our brain, and are linked to our neurobiological system (Damasio 1994; 2000; Damasio et al. 2000; LeDoux 1996; 2003; Oatley et al. 2006).

Damasio (Damasio 1994; 2000; Damasio et al. 2000) defines emotions as biological and automatic relating emotions to the physiological and neurological

reactions to a certain stimuli. He argued that emotions come from the cortical and subcortical regions of the brain. LeDoux (1996), also defines emotions as 'biological functions of the nervous system' (1996, p.12). He defines emotions as biological and innate, localized within the temporal region of the brain (LeDoux 1996; 2003; Oatley et al. 2006). In his research on the emotion of *fear*, LeDoux states that '[T]he amygdala is able to process the emotional significance of individual stimuli as well as complex situations. The amygdala is, in essence, involved in the appraisal of emotional meaning' (1996, p.169). LeDoux also discussed the role of the prefrontal cortex and the cognitive function of working memory in the experience of *fear*. While both Damasio and LeDoux discuss emotions in relation with the body, and pinpoint where they reside and function in the brain, their work has less emphasis on emotion in cognition.

Both James and Cannon inspired many researchers to scientifically study the link between emotions and the body, especially in locating the center of emotions in the human brain. However, where James's theory offers ways to differentiate emotions using specifically allocated reactions, Canon's theory states that all physiological reactions are similar in all emotions. Both theories fail to explain how the categorization of an emotion differs from one culture to another to the same bodily expression and mental state of the emotion, especially a reaction that is typical of a certain emotion but not the other, tears for example. To provide a more comprehensive definition of emotion in addition to the bodily element concluded from research in this approach, the following section looks into the cognitive evaluations of an emotion and of its triggers and reactions, as well as the cultural influences that surround any given emotion which can aid in differentiating between different emotions using cues from our bodily reactions and of situational factors.

C: The Cognitive Approach

Perhaps it was Aristotle 384-322 B.C. (2003; 2010) who first paved the way into the understanding of what emotions are and provided an analysis to understanding different emotions. In his *Rhetoric* in $1378^{b}20 – 1380^{b}4$ (Aristotle 2003; 2010; Oatley et al. 2006), he discussed human emotions, often using *anger* as an example. Aristotle defined *anger* 'as an impulse, accompanied by pain, to a conspicuous revenge for a conspicuous slight directed without justification towards what concerns oneself or towards what concerns one's friends' (2010, p.60). In other words, to Aristotle, an emotion is an impulse resulting from an evaluation of an event that raises a concern and urges one towards an action. In the case of *anger*, one is *angry* when he (or a friend) is slighted (scorned, thwarted, or shamed) for example one's belief of the wrongness of such a slight, belief of his social status, and belief of how a person should be treated causes the slighted person to think of the act of revenge. Emotions are therefore dependent on our beliefs of our surroundings, i.e. our evaluations of the world, and these beliefs or evaluations affect our choices and actions (Jenkins et al. 1998; Oatley et al. 2006). Aristotle also argued that all emotions involve pain and pleasure and that feeling pleasure or pain from an outside trigger causes an impulsive thought, and therefore, an action towards the trigger. Fortenbaugh (2002) explained that Aristotle linked emotions with thought, that emotions are related to our cognitive and physical beings. Fortenbaugh further explained, '[A]nger is not a pain which happens to occur together with (*meta*) the thought of outrage. On the contrary, anger is necessarily caused by the thought of outrage, so that such a thought is mentioned in the essential definition of anger' (italics in the original) (2002, p.12). In his *de Anima* in $403^{a}2 – 403^{b}19$, Aristotle stated that emotions also combine one's beliefs, bodily motions, and physiological changes (2003, p.5) hence, tying emotions not only with the mind, but with bodily reactions as well. Aristotle's definition of emotions and his emphasis on the cognitive view on emotions,

i.e. emphasizing the role of thought in emotional response, triggered a new psychology and influenced many theories on emotion and cognition.

Schachter and Singer in 1962 (Schachter & Singer 2003; Niedenthal et al. 2006; Oatley et al. 2006) argued that emotions combine both mind and body, whereby cognition is important to be able to tell which emotion is which when physiological reactions occur. In other words, one's emotional experience according to Schachter and Singer is a physiological reaction that stems from one's appraisal of a situation, and accordingly one attaches a label to this experience. Schachter and Singer (2003) devised an influential and quite cunning experiment that looked into the importance of cognitive factors in explaining physiological arousal in emotions. They told their participants that they were testing the effects of a new vitamin called 'Suproxin' on their eyesight. They injected half their participants with epinephrine (adrenalin) to cause physiological arousal, and the other half was given a saline solution as a placebo, which caused no physiological reaction. Half the participants who were injected with the epinephrine were then told of the effects of the injection, while this information was withheld from the other half. These participants were then put into two different situations: half were put in an euphoric environment where they were laughing and joking with the experimenter, and the other half in an environment inducing *anger* using an insulting questionnaire with an accomplice who expressed his *anger* and induced the *anger* of the participants. The uninformed epinephrine injected group acted *happily* and reported feeling *happy* in the euphoric environment, while those in the negative environment acted *angrily* and reported feeling *angry*. The informed group reported lower levels of *happiness* or *anger*, arguably because they attributed the effects of their heart beating, heavy breathing, face flushed, and their hands shaking to the injected substance. The placebo injected group did not report feeling anything. They concluded: 1) In a state of physiological arousal with no explanation as to why such changes are occurring in their bodies, participants

will feel, act, and label their emotions according to the available cognitive aspects in the situation they are in. 2) In a state of physiological arousal where the participants have an immediate explanation as to why such bodily changes are taking place, they will not feel the need to evaluate the surrounding or situational environment in search for a label. 3) In the same cognitive situations as reported above, participants will only react emotionally and report a certain emotion only to the extent of their state of physiological arousal (Schachter & Singer 2003, p.118). Perhaps emotions do combine cognitions and physiological arousal; however, as influential as Schachter and Singer's research was, it still does not explain how and why the same physiological changes occurred for two very different emotions and were labeled differently according to the situational environment, or beliefs about its nature.

Both Solomon (2003) and Nussbaum (2003) defended and supported the cognitive theory of emotions. Nussbaum argued that emotions are evaluative judgments and that they depend on our beliefs. Each emotion has a set of beliefs and taking away those beliefs takes away the identity of the emotion. Nussbaum provided an example whereby her *fear* would have turned to relief should her mother's medical news change for the positive, and so the changing of the situational factor provides a new set of beliefs, hence triggering a new emotion. Moreover, Nussbaum explained that emotions need to have an object that sparks them, not only that, but also how that object is perceived internally is what constitutes an emotion. We differentiate emotions from one another according to how we perceive a certain emotion and how we inspect the thoughts that surround it. Nussbaum, however, does not believe that physiological reactions are necessary to constitute an emotion. In her grieving state at her mother's death she argued that the usual bodily reactions and physical changes that are typically related to *grief* such as high blood pressure and increased heart rate are not critical to the definition of

the said emotion. Nussbaum believes that emotions are experienced internally more so than they are physically, although most of the time physical changes do occur.

However, recent research argues that emotions combine cognitive appraisals along with the biological reactions, whether neurologically or physiologically, and working memory, and result from an emotional situation or context (Thagard & Aubie 2008). One may not necessarily display physiological changes, but there may be neurological ones that occur in the brain, hence one cannot simply disregard the importance of biology as a factor in a given emotional experience. However, this adds to the definition of emotions in the sense that an emotional experience, as inferred from Nussbaum's example, is not only an external physiological experience, but also an internal experience as well; an experience that involves thoughts, evaluations, beliefs, and judgments.

In Scherer's (2009a, 2009b) influential theory of emotions, the Component Process Model, he looks at emotions as a phenomenon not just as a subjective feeling, but also as a physiological process that is related to thought, language, and cognition. Basically in the subjective emotional experience, the emotional event results in an appraisal on multiple levels of processing, which in turn results in behavioral adaptive changes and a motivational effect, i.e. changing and modifying the motivational state and the tendency to act, as well as effects in the physiological state namely the autonomic nervous system and the somatic nervous system, i.e. expression on the face, body, and voice. The emotional experience also goes through the process of perception and categorization, including culture specific reactions and the use of the available discursive resources in the form of labeling using emotion words, expressions, and metaphors. This experience is a dynamic recursive process and is fused in a multimodal integration area, which is continuously updated and changed (2009b, pp.1308-1309). Scherer also defines the appraisal process with four criteria of appraisal that continuously interact: 1) a low-

level neural circuit that is related to 'biological preparedness' such as encountering snakes, 2) a schematic level which is based on memory traces from social learning process and is considered automatic, 3) an association level which involves various cortical association areas and is also automatic and unconscious, and 4) the conceptual level which is based on the propositional knowledge and the underlying cultural meaning systems as well as the available linguistic labels and requires a conscious effort (2009b, p.1314). Scherer also recognizes crosslinguistic and crosscultural influences on the emotional experience. Scherer (2009b) states that even if the eliciting event is objectively the same, it is subject to individual differences and may be culture based, which effectively explains why some cultures are more likely to experience certain emotional experiences and perceive them differently than others. There are fine-grained differences in emotional experiences between people and these differences can be seen in the linguistic terms or labels used when describing same emotional experiences (Scherer 2005). Further research has indeed found evidence of individual differences in the emotional experience and patterns of appraisal and this can be extended to differences between cultures and languages (Kuppens et al. 2007; Kuppens et al. 2009; Kuppens & Tong 2010).

Further research by Russell (1980; 1991; 1994; 2009) also defines the emotional experience as the cognitive appraisal of a two dimensional circular space containing valence and arousal in his Circumplex Model of emotions. Russell (2009) defines emotions from a psychological constructionist point of view whereby emotions are constructed from our basic psychological structure in what he defines as the core affect. The core affect is 'a pre-conceptual primitive process, a neurophysiological state, accessible to consciousness as a simple non-reflective feeling: feeling good or bad [the dimension of valence], feeling lethargic or energized [the dimension of arousal]' (Russell 2009, p.1264). Therefore, in an emotional experience a person goes through

psychological (valence) and physiological (arousal) changes, and the evaluation of the changes in one's valence (whether one feels the emotional experience to be good or bad/ positive or negative) and one's arousal (whether one feels high or low in energy) is what defines how this person is feeling. When experiencing an emotion, Russell also states that the experiencer also brings 'a set of concepts embedded in a set of implicit assumptions and inherited from our linguistic ancestors' (2009, p.1275) whereby language plays an active role in the differentiation between different emotions. Russell (2009) further adds that the situational context as well as evaluations of facial expressions, changes in the voice, physiological changes, changes in behaviour also play a part in labelling the emotional experience as one or the other. Russell (1991; 1994) further recognizes the crosscultural differences in the categorization and differentiation of emotions.

Furthermore, Solomon defines emotions as 'a basic judgment about our Selves and our place in our world, the projection of the values and ideals, structures and mythologies, according to which we live and through which we experience our lives' (1993, p.126). He regarded emotions as evaluative judgments conditioned by how we evaluate ourselves, our world, and how we place ourselves in our world. To conclude, we do not create these judgments; they are influenced by our society and instructed to us by our social relationships; hence, emotions may be regarded as cognitive and influenced by the culture we live in.

D: The Cultural and Social Approach

This approach focuses on defining emotions from a social and cultural point of view. Most of the theories that follow this approach have their roots embedded in the cultural constructionist theory and social psychology. Culture is defined as a composition of 'a large number of symbolic processes, which include lay theories, interpretive schemas, images, and icons that are shared by members of a group and revealed in daily

rituals, habits, and customs, which we refer to as cultural practices' (Niedenthal et al. 2006, p.312). Emotions eventually and essentially serve a social role and function within any given culture (Keltner & Haidt 1999; Frijda & Mesquita 2001). Feelings of *love*, *hate*, *anger*, *jealousy* all spring from social situations that evoke them. The social environment provides emotional meanings that become attached to the emotion because of the feedback one gets when feeling and displaying emotion, from the social event, the emotional object, the members included, and one's self as well.

These meanings also provide the norms of behavior, and the rules for coding and understanding the event. Each culture provides different meanings and different codings to the same event, thusly giving new meanings to the same emotions, or evoking different emotions altogether (Frijda & Mesquita 2001). Therefore, emotions are regarded as abstract concepts and they differ from one culture to another according to how such concepts are perceived. A concept is a 'non-linguistic multi-modal information, which includes imagery, schemas, motor programs, and auditory, tactile and somatosensory representations, based on experiential world knowledge' (Pavlenko 1999, p.212) that 'allow members of specific language and culture groups to conduct identification, comprehension, inferencing, and categorization along similar lines' (p.211). Moreover, concepts are susceptible to change and amendment according to one's experiences, socialization, and expertise (Jarvis 2011). Therefore, concepts are specific to the culture of which they come from, which is therefore projected and carried onto its language, and they could be of anything whether an 'object, quality, action, event, relationship, situation, sensation or any other perceivable or imaginable phenomenon for which the mind creates a mental category' (Jarvis 2011, pp.3–4).

This is why the social constructionist approach defines emotions as being born from the meanings, values, relationships, and interactions that a culture supplies (Harré 1986; Parrott 2001) taking into consideration the influence a given society has on

emotions, and the influence of emotions on social psychology and our social behavior (Markus & Kitayama 2001; Parrott 2001). This approach mainly agrees with the cognitive theories that emotions result from assessing an emotional situation, and rejects the idea that emotions are solely biological (Niedenthal et al. 2006), for 'emotions are not just things in the head but essentially involve culture' (Marks 1995, p.5). Social constructivists define emotions as 'biologically generated elements which must be enriched by meanings before becoming emotional experiences' (Parrott & Harré 1996, p.2). They do not disregard the importance of the biological and natural element in the definition of emotions, but rather define these neurological and physiological emotional reactions as products influenced by culture and that culture is what shapes our emotions (Kitayama & Markus 1994; Parrott & Harré 1996).

Lutz (2003) called emotions '*unnatural*' in her book titled *Unnatural Emotions* in 1988. By unnatural, Lutz does not deny the biological element in our emotions, but insists that emotions are primarily products of culture. Lutz argued that the concept of emotions 'serves a complex communicative, moral, and cultural purposes rather than simply as labels for internal states whose nature or essence is presumed to be universal' (2003, p.144). During her anthropological studies in the island of Ifaluk in the South Pacific, she noticed that the inhabitants expressed their emotions differently from what she is accustomed to in her language. She not only noticed that there were difficulties in translating emotion words from English to Ifaluk, and vice versa, but also encountered difficulties when coming to understand the cultural context of these emotions, i.e. differences in the cultural associations to emotions. For example, the emotion word *ker* in Ifaluk, which Lutz roughly translated as *happiness/excitement*, is an emotion that is frowned upon when showed, as it reveals a person as showing off, being too pleased with himself, and rowdy, so it was best that it is avoided, instead one should appear gentle, calm, and quiet (Oatley et al. 2006, p.70). Moreover, Lutz also noticed that the

physiological reactions that accompany a given emotion are themselves products of that culture as well, which is why she sees emotions as 'anything but natural' (in Kitayama & Markus 1994, p.5).

Different studies that followed the social constructionist approach showed that in order 'to produce an adequate description of an emotion one must include both situational or social and cognitive elements in addition to the obvious affective elements' (Harkins & Wierzbicka 2001, p.8), and that 'the socially accepted ways of thinking about the kinds of events that provoke [insert emotion word] and the kinds of behavior that result from these feelings are integral parts of the emotion itself' (Harkins & Wierzbicka 2001, p.7). For even in Ekman's studies, as much as he advocated against the role of culture, he found that culture does indeed play a role in the display, inhibition, and control of the affective elements of emotions. This may entail a bigger role that a culture plays than what Ekman attributes to it influencing the 'basic emotion' itself in all of its components.

To conclude this overview, the approaches briefly discussed in this section each add an important factor that can be taken to define what an emotion is, and how to differentiate emotions from one another by means of their triggers, expressions, evaluations, and physiological reactions. Therefore, this study has to adopt a definition that combines all of the elements the theories discussed such as the behavioral element, the physiological element, the cognitive element, and the social and cultural element in its inquiry of the emotions of *excitement* and *frustration* and their expressions between English and Arabic. Thus far, from the theories and approaches surveyed here, an emotion can be defined as an innate natural occurrence embedded in our behaviour, a reaction to a trigger that is internally (psychologically) felt and is cognitively evaluated and also physiologically manifested. It is also a concept that is affected by culture

evident in the meanings, display rules, and the language used to express any given emotion.

As important a role that the cultural factor plays, and as evident from the approaches reviewed in this overview, the role of culture in the definition of emotion as a concept and of different emotions and manifestations of emotions is not widely accepted by those who advocate the universality of emotions. In the following section I explore and discuss the role of language in the argument about universality or culture specificity of emotions, which will further add another element into the definition of emotions.

2.2.1: Emotions, universal or specific? Evidence from a linguistic point of view

Divided between nature and nurture, evolutionists and universalists argued for the universality and innateness of emotions, while relativists, social constructionists, cognitive linguists, and cultural psychologists argued against nature in favor for culture in that emotions are a product of nurture born and bred by society. On the one hand, universalists like Darwin (1998; 2003) regarded emotions as biological being embedded within our natural behavior as we evolved as human beings. Many researchers including Ekman and Friesen supported such a claim in their research providing evidence that there are emotions that are universal as they have agreed upon facial expressions (Ekman 1980; 1992; 2003; 2004b; Ekman & Friesen 1971; 2003; Izard 2007; LeDoux 1996).

Conversely, universals were only found in Ekman's (1980) six 'basic emotions' which are: *happiness*, *sadness*, *anger*, *fear*, *surprise*, and *disgust*. He later added the emotion of *contempt* as well (1999). Moreover, in the Papua New Guinea experiment, Ekman and Friesen's experiment showed that the participants failed to distinguish between *fear* and *surprise* (Ekman 1980; Ekman & Friesen 1971; 2003). These same two emotions are considered universal, but evidence from their own experiment clearly showed that a certain culture failed to tell them apart. Moreover, Izard proposed a different set of 'basic' and natural emotions which are: *interest*, *joy*, *surprise*, *sadness*,

anger, *disgust*, *contempt*, *fear*, *shame/shyness*, and *guilt* (in Wierzbicka 1986b) and then later on modified it to: *interest*, *joy/happiness*, *sadness*, *anger*, *disgust*, and *fear* (Izard 2007, p.261). There seems to be a disagreement even between the universalists as to which emotions are indeed 'basic' and are therefore, universal. An issue that Ortony and Turner (1990) also argued against. To come to a conclusive definition of what an emotion is, all emotions must be taken into consideration. All aspects of an emotion must be considered to understand their nature and not just explain a set that has an evolutionary and 'natural' quality, and disregard other emotions that do not fit the categorization that theorists proposed as to what is basic and what is not.

On the opposite side of the debate, Wierzbicka (1986b; 1994; 1998b; 1999) argued that these proposed basic emotions are assumed and enforced by the cultural influence of the English language and do not mean the exact same as their closest translation equivalents in other languages. She argued against using the English language as a basis for emotion research as this provides a misguided view. Emotion words in English may be culturally specific to the English language and may not apply to other languages and cultures, and therefore, cannot be labeled as universal or basic. She provides an example that the Polish language does not have a word for the English emotion of *disgust*, a presumed 'basic' emotion by both Ekman and Izard, while the closest equivalent in French *dégoût* does not mean the same thing (Wierzbicka 1986b).

Lutz (2003) further offered an example between the English emotion word *anger* and its closest equivalent in Ifaluk *song*. *Song* is a less aggressive feeling and one is less likely to portray physical violence; *song* is a 'justified anger' where the feeling is more directed toward oneself and mainly portrayed in reprimands, refusal to eat, pouting, and in some cases suicide (in Wierzbicka 1994). In other words, a form of *anger* that is projected inwards not outwards. *Song* also entails another person's *metagu* 'fear' (Pavlenko 2002b; 2014). As another example, the Ilongot language of the Philippines

does not have an exact word that is equivalent to the English word *anger*, the closest corresponding word is *liget* which means 'energy, anger, passion' (Wierzbicka 1988, p.982) and is also related to attributes that are close to 'envy and ambition' and are not commonly associated with the English *anger* (p.983). Clearly *liget* differs from *anger*, as *anger* 'has its basis in the thought that 'someone did something bad' . . . and that 'I don't want such things to happen''(p.983). Additionally, *marah* in Malay is the closest equivalent to the English emotion *anger*, but is not quite the same conceptually, since *marah* has to do with being offended and having been treated badly (Harkins & Wierzbicka 2001).

In addition, there are also studies on cultures that do not distinguish *sadness* from *anger*, in fact, there are examples of languages that have one word for both *anger* and *sadness* such as Ilongot and Ifaluk (Pavlenko 2014). There are also studies on cultures that do not offer words for *happiness*, *surprise*, *anger*, *fear*, *sadness*, and *disgust*. A study on the Chinese equivalents to the English emotion word *sadness*, namely: *bei* 'sorrow and a tragic and fatalistic sadness', *ai* 'sorrow and an ethical and altruistic grief and mourning', and *chou* 'confused sadness, worry, and melancholy', with *bei* and *ai* considered as 'basic emotions' in Chinese texts, revealed that the concepts are entirely different from their English counterparts, and hinders the understanding of Chinese emotion concepts when simply translated into *sadness*, *grief*, and *sorrow* (Ye 2001).

In fact, Wierzbicka argued that *sadness* cannot be universal or basic as the word itself is a cultural artefact and is specific to the English language (Harkins & Wierzbicka 2001; Wierzbicka 1999). She further provided an example of equivalents of the English emotion word *sadness* against the Russian *toska*, *grust'*, and *pečal'* in which she arrived at the same conclusion, whereby even though concepts may be somewhat similar, they still carry cultural weight and meanings (1999).

Therefore, according to the examples discussed above, constructionists investigated the cultural influence on social behavior emphasizing the role of culture. They pointed out cultural differences and regarded biological reactions as products shaped or managed by culture using linguistic differences in their arguments. Pavlenko explains, '[L]anguage, in this paradigm [being culturally loaded], no longer 'mirrors' the world of emotions but instead actively constructs and reconstructs it' (2002b, p.209).

Further adding to the argument by expanding the issue of translating emotions from one language to another since this issue of translating emotions has proven to be crucial, yet quite problematic. During her fieldwork, Lutz discovered the issues of translating emotions from one culture to another and argued that the 'complex meaning of each emotion word is the result of the important role those words play in articulating the full range of a people's cultural values, social relations, and economic circumstances' (2003, p.144). Some concepts can be easily translated and transferred to other languages, and these are what Wierzbicka calls decomposable concepts, such as 'bad', 'do', 'feel', 'think', 'say', 'happen', etc. However, emotion words are not as easily translated, and are non-decomposable (Harkins & Wierzbicka 2001, p.8).

Russell (1991) argued that even when translating and back translating words and finding a closest translation equivalent to an emotion word, equivalents may not necessarily be equivalent. That is not to say that for example, *frustration*, cannot be described in another language, in fact, it can be so using concepts that the languages in question share such as *frustration* being a feeling of *anger*, and *disappointment* that is caused by an obstructed goal for example, assuming that these two languages offer words that convey the concepts of *anger*, *disappointment*, and obstructed goals. In addition, offering an example of the contextual and situational concept of the emotion in question by having it set in a prototypical situation where one would, for example, feel *frustrated*. Providing an entire scenario or context will provide one with an understanding of the

emotional concept in question. Lutz stated that '[I]t has commonly been observed that the process of translation involves much more than the one-to-one linking of concepts in one language with concepts in another. Rather, the process ideally involves providing the context of use of the words in each of the two languages between which translation is attempted' (2003, p.145) and 'to understand the meaning of an emotion word is to be able to envisage (and perhaps to find oneself able to participate in) a complicated scene with actors, actions, interpersonal relationships in a particular state of repair, moral points of view, facial expressions, personal and social goals, and sequence of events' (p.146). Therefore, translating an emotion word, or a culture specific concept involves putting oneself in the context or scene in which the emotion word is encoded in, and then comparing the two languages and cultures. Even translators acknowledge the importance that the different ways emotions were conceptualized in different cultures and language, creates a difference in their translations (Clarke 2011), and that in order to translate emotions in an authentic fashion, one must understand the culture itself and the cultural interpretations that accompany the emotions and attempt to cross the 'cultural and temporal boundaries' (Kinsella 2011, p.60).

Lakoff (1990) argued that translation also differs from understanding. One can perhaps understand a concept, but may not able to translate it to his/her respective language. He argued that '[A]ccurate *translation* requires close correspondences across conceptual systems; *understanding* only requires correspondences in well-structured experiences and a common conceptualizing capacity' (italics in the original) (1990, p.312). The difficulty behind translating nonequivalent emotions is because of the 'dramatic cross-linguistic variation in the organization of the emotion domain on all three levels of lexical encoding: superordinate, basic, and subordinate' (Pavlenko 2014, p.254). Consequently, from the problems that researchers and anthropologists face when translating emotion words, it seems that they are a product of culture, and in order to

translate them into another language one has to fully understand the culture that the emotion word comes from and its various contexts.

In addition, and further adding to the nature versus culture argument, there are studies that looked into the metaphors of the language of emotions and studied any crosslinguistic similarities and differences in emotional metaphoric expressions (Apresjan 1997; Kövecses 2003; 2012; Lakoff 1990). Studying metaphors aids in understanding how people think and how they conceptualize the things in the world that surrounds them. The basic structure is more or less the same across all emotion metaphors that is, they compare a psychological state to a physiological state or to another material phenomenon. However, emotion metaphors differ in the 'phenomena that form the source domain for the metaphorical mapping and the kind of mapping that takes place' (Apresjan 1997, p.180), and according to the basic structure of the metaphor the source domain is either physiological or a cultural object.

In a study comparing English and Russian emotion metaphors, no differences were found between the physiological metaphorical expressions of *fear*, *anger*, and *disgust* between English and Russian, whereby some examples include *fear is to get cold feet*, *anger is to explode*, and *disgust is to be nauseated*. Conversely, in the cultural metaphorical expressions there seems to be a crosslinguistic variation for some metaphors, for example, the English metaphor *to feel blue* does not translate to the Russian culture, as well as the example of *feeling green with envy* in English is *to turn yellow with envy* in Russian (Apresjan 1997).

In another study that traces the metaphors of *anger* in four different cultures namely: English, Hungarian, Japanese, and Chinese that spring from the *pressurized container* image, one example being *to explode*, cross-cultural similarities that trace back to similarities in the human body reactions were found (Kövecses 2003). However, the author acknowledges the possibility of such metaphors being transmitted between

cultures. Moreover, the author also traces cultural influences in the conceptualization of *anger* and found differences in the explanations and interpretations when experiencing the emotion of *anger*. These differences include: differences in the display of the emotion, in the range of expressions that are culture-specific and are not salient in other cultures, and in the elaboration and explanation of the metaphor itself.

Similar studies comparing metaphors when talking about *anger* between Zulu and English have also reached the same conclusion, whereby there were similarities found between the two languages in the metaphors used to describe the feeling of *anger* such as *anger is heat* and *anger is a dangerous animal*. Differences were also found, however, in the specific explanations of these metaphors, in the frequency, range, and targeting of these expressions, and the how much of an emphasis a language/culture has on the various aspects of *anger*. Nonetheless, the researchers admitted that the translation equivalents between *anger* in English and in Zulu are not exactly the same and that *thukuthela* is a special aspect of *anger* in Zulu (Taylor & Mbense 1998).

In another study comparing the concept of *anger* between English and Polish by comparing the metaphors each language uses to convey the emotion of *anger* found commonalities between the two languages when experiencing *anger*, i.e. in the physiological and psychological state, for example, in the intensity, passivity, and lack of control. However, differences were found in the value system and codes each culture dictates in terms of behavior, leading the researcher to believe that *anger* may not be a universal concept (Mikołajczyk 1998).

Furthermore, a diachronic study traced emotion concepts such as *happiness*, *sadness*, *love*, *hate*, *anger*, and *anxiety* in four different languages namely: English, Russian, German and Hungarian, in which three of these languages belonged to the same family. The researcher compared these emotion concepts using a historical semantic analysis and found that in all of the tested languages the physiological, psychological,

and behavioural references to the emotions in question were more or less quite similar to the universal attributes these emotions have.

However, differences were found in all of the tested languages when it comes to the actual linguistic expression of the emotion in that cultural variations were found in the metaphorical conceptualizations of these emotions and how they came to affect the lexicalisation of the emotion. Each culture or language highlights different components and provides metaphors and different conceptualizations of a given emotion, thus creating a different emotional experience. In other words, the concept of emotion is made up from universal components but it is a complex combination that depends on how a certain culture looks at these different components in different ways.

Hence, some metaphors may be cultural artifacts and therefore, even universal or basic emotion concepts such as *anger* can become culturally affected. In such studies that focus on the metaphors that each language offers, they highlight the cultural factor in the understanding of emotions not only as to what metaphors are used in the emotional expression, but how one comes to use and understand these metaphors. In other words, for one to understand a metaphor, one has to belong to the culture where the metaphor originated from and is used, where the system of values and beliefs becomes embedded in the metaphor, and where the linguistic conceptualization is attached to words used to describe the image in the metaphor.

On the one hand, universalists argued that by detecting the evolution of emotion and how it affects the body, it would help explain their importance and their function in our lives, but on the other hand, the social constructionists argued that by looking at the differences in behavior and variances in different social roles and expectations across different cultures, it would provide insight to emotions and emotional expression and interpretation. It may be plausible that universally felt emotions during the process of language acquisition according to the language(s) each culture provides, the reality of

those universal emotion becomes altered or (re)defined. Therefore, the same emotion may be learned, felt, interpreted, and defined differently due to the labels they are given by certain cultural teachings.

According to studies by Russell and Scherer (Russell 1980; 1991; 1994; 2009; Russell & Widen 2002; Scherer 2005; 2009a; 2009b), language plays an active role in the categorization and evaluation of the emotional experience and that differences in categorization convey differences in cultures, which in turn convey differences in the concepts of emotions, which can be traced to differences in languages. Scherer (2005) stated that language offers categorization through semantic fields and that 'language-based categories correspond to unique response patterns, i.e. emotion category specific patterns of facial and vocal expressions as well as physiological response profiles' (2005, p.717). Scherer (2009b) also provides language as one of the subcomponents in the Componential Process Model of emotions, in which language plays a part in the appraisal process of the emotional experience. Further studies by Russell and Widen (2002) on children labeling emotions and facial expressions found that children develop recognition for the label (the emotion word) before recognizing the corresponding facial expression. Their research concluded that the label is superior to the face, whereby children know the meaning of the emotion label before knowing the meaning of the facial expression. In other words, their research found that language, i.e. the acquisition of emotion labels, plays a key role in the acquisition of a given emotional concept. Language in this respect plays an important role in constructing the understanding of the emotion including its facial expression and is what aids the categorization and differentiation between different emotions such as *anger* and *disgust* for example.

In Barrett's Conceptual Act Model (Barrett 2009; Barrett et al. 2007), it was suggested that emotions may indeed be an innate phenomena, but they are defined through language and culture. Therefore, interactionists, those who combine universal

elements with cultural factors, maintain that emotions may be a combination of both biological universals and cultural influences (Lazarus 1991), and such cultural influences may be found in eliciting situations, different contexts of the emotion, display rules, salience, etc. If human beings were indeed universally wired to have the same biological and cognitive reactions (Pinker 1994; 1997; 2003), then it might be possible that the linguistic labeling is what differs from one culture to another, according to how each culture perceives and expresses the same emotion according to their social value or meanings associated to them. It is clear that most arguments that surround emotions are on the label of the emotion and what each label refers to, whereby the core of the emotion may be universal in essence.

Although the universality of the physiological reactions to the emotions may be possible, the physiological state of the emotional experience may also be culturally influenced because of the different triggers and social regulations (Kövecses 2003). Regardless of the fact that some psychophysiological processes and facial expressions may be universal or not, the labeling of emotions and the cultural interpretation of such expressions may be what differs. Levy in 1973 provided an example of the possible different interpretations of the same physiological reaction to *sadness* when he noted that:

> Tahitians, . . ., not only do not have a word for sadness, they seem to have no concept of it and, correspondingly, no ritualized behaviour for dealing with depression or bereavement. They appear to experience sadness and depression, but have no way to cope with it. They categorize sadness with sickness, fatigue, or the attack of an evil spirit (from Lakoff 1990, p.310).

Thus providing evidence that each culture defines and perceives certain emotions a certain way, and that even basic emotions are governed by culture specific connotations; hence, may be given a specific label.

Depending on the idea of the universality of emotions to explain and interpret emotions while disregarding any semantic differences with regards to connotation and

emotional weight that each culture attributes causes learning another language where emotions may be labeled differently flawed by inaccurate translation. The studies discussed above compared emotions that are more or less available in other languages, and compared concepts that may be similar and more or less comparable. There are cases where there are emotional concepts that are language-specific and a translation equivalent is not readily available.

Some examples of culture and language specific emotions include: *frustration* in English (Panayiotou 2004a; Pavlenko 2002a; 2002b; 2005; 2008b; 2008d; 2014; Pavlenko & Driagina 2007; Wierzbicka 1999), *fago* which means 'love, compassion, and sadness' in Ifaluk (Lutz 2003) as '[F]ago is used to alert others to the strength of particular relationships, to talk about pain involved in the severance of those relations by death or travel, and to signal a readiness to care for the other' (Lutz 2003, p.151), *stenahoria* which is close to 'discomfort, sadness, and suffocation' in Greek (Panayiotou 2004a), *perezhivat* which is close to 'having to suffer over and over' in Russian (Dewaele & Pavlenko 2003; Pavlenko 2002a; 2002b; 2007; 2008b; 2008d; Pavlenko & Driagina 2007), *cariño* which is similar to 'like' in Spanish (Grabois 1999; Altarriba 2003), *amae* which is close to 'affection, love, and dependency' in Japanese (in Harkins & Wierzbicka 2001), *anibre* which 'refers to both jealousy and determination to achieve something' and is known as 'red-eye' in Fante (Pavlenko 2014, p.256), and *angst* which is a state close to 'anxiety and fear' in German (Wierzbicka 1999).

These emotion words may seem linguistically translatable, as evident from these examples, some have a somewhat close equivalent but not quite, they remain, however, culturally untranslatable. There are even examples of emotion words that may have a linguistic translation equivalent in other languages such as *shame*, *guilt*, *anger*, *sadness*, and *love*, however, these emotions are constructed by our understanding of our own culture, and so may not saliently translate into another (Panayiotou 2004a; 2006;

Wierzbicka 1999). Therefore, in order for such emotion words to be fully translatable into other languages, they not only need to be semantically equivalent, but conceptually equivalent as well (Pavlenko 2005), and that is not a common case since culture dictates situational contexts, appraisals of emotional experiences that depend on external and mental factors, physiological states, display rules, etc.

Studying emotional language aids the understanding of the effect of culture on identifying emotions; by 'looking at the uses of words not only sensitizes the investigator to his or her own ethnocentric presuppositions, but allows for the possibility that other cultures may use closely related concepts in very different ways' (Harré 1986, p.5). Not only that, but also, language aids with the understanding of what a person is going through emotionally. In other words, it is through language that we are able to tell if, for example, a person is feeling *angry* as expressions, physiological responses, and evoking situations might vary as 'one may turn red with anger, glower and shout in one situation and appear white-faced and icily polite in another' (Harkins & Wierzbicka 2001). To conclude, as evident from the discussion of the arguments in this section, emotions also consist of a linguistic element. Therefore, an emotion thus far is an experience that is biological, physiological, psychological, cognitive, cultural, and linguistic and a conclusive definition that can be adopted for this current study should combine all of these elements.

2.2.2: Emotions - A 'linguistic' definition

Panayiotou (2004a) proposed a definition of emotion where she includes the cultural element along with acknowledging the biological and physiological elements as well. She specifies six fundamental aspects of what constitutes an emotion:

> (1) A biologically manifested element (such as blood pressure rising), (2) bounded by a bodily experience, (3) understood as the cognitive appraisal of a situation, (4) created and learned within a particular cultural meaning-making system, (5) constituted "in context", and (6) determined by how language describes and catalogues the element in a particular culture (2004a, p.4).

An emotion is an innate biological and thought about experience, and is measured not only on a social level but on a personal one as well. It requires a cognitive reaction, a psychological one, and a physiological reaction in the body, perhaps also seen in the face, in gestures, and interjections as well. Moreover, an emotion is governed by the culture where it was created, evident in the 'display rules' that may be attributed to it, and it is also enveloped in a context where emotions tend to have certain contexts that trigger them. And finally, Panayiotou also includes 'language' as an essential aspect that aids in the definition of emotions whereby it is considered a definitive ingredient in any given emotional concept.

Additionally, it is with language, that a culture manifests its influence on emotions. 'Emotions are not themselves linguistic things, but the most readily available nonphenomenal access we have to them is through language' (Ortony et al. 1990, p.9). Therefore, language aids the understanding of emotions whether in one's native language or in the learning and understanding of emotions in a foreign or second (or more) language(s). Studying and comparing different emotion words that describe the same emotional concept and looking at the language of emotions between different languages also aids in identifying the possibility of influence on the emotional concept of the first language by being introduced to emotion words that carry a different concept to the same emotion in another language.

2.3: Linguistic relativity - Thought and language

The idea of language influencing a given concept in another language was advocated by the scholars behind the linguistic relativity hypothesis. The linguistic relativity hypothesis dates back to Wilhelm von Humboldt in 1836 (1999) where he claimed that there is a mental power that is responsible for our language, thoughts, feelings, beliefs, etc., and is also the reason behind the diversity in languages and cultures. According to Humboldt, language shapes one's world view and each language

carries along with it its own characteristic world view and therefore determines peoples' thoughts and cognitions. He also claimed that without language, concepts in the mind are not possible, i.e. you cannot think without language. Moreover, according to Humboldt, because each language has its own world view, learning another language entails the learning of a new world view that is associated with that new language. And sometimes, language learning may be affected by opposing world views, and one will either have to adopt new or 'foreign' world views, or else the foreign language learning will be affected by the world views of one's first language.

In the 1920s, Edward Sapir (1949) expanded Humboldt's views on language determining thought and introduced the 'Linguistic Determinism Hypothesis', whereby he claimed that culture determines language, and that in turn determines the way people think. In other words, the language that people speak according to their cultural orientations determines their thoughts and views of the world, and that thoughts are 'at the mercy' of a particular language (Sapir 1949, p.162). As for his view on language learning, he shared Humboldt's view that '[T]o pass from one language to another is psychologically parallel to passing from geometrical system of reference to another' (Sapir 1949, p.153). Sapir also shared Humboldt's view that thoughts cannot exist without language, as Humboldt claimed language to be 'the formative organ of thought' and that thought and language are 'therefore one and inseparable from each other' (1999, p.54).

This is one reason why this theory was hard to prove as thoughts and world views were hard to measure when taking away the linguistic factor, hence so highly debated. Evidence around us suggests that thought can exist without language, as babies think before they start to speak and acquire language, and then there are those who cannot speak for medical, psychological or even social reasons, those who are deaf and did not acquire any form of sign language, and then there are those who lost their language

abilities due to an unfortunate accident, do they stop thinking? Arguing against determinism, Pinker thought it was 'against all common sense' (1994). Indeed, language is not simply vocal or motor skills alone; it requires something far more advanced, something *in the head*, a mental faculty. However, even if language is essentially a biological mental activity before it becomes verbal, this does not equate it to thinking. Pinker argued that thoughts exist separate from language; in fact, he argued that thoughts exist prior to our natural language using a mental language that is nonlinguistic in nature in which he called, using Fodor's term, 'Mentalese' (Pinker 1994).

Other researchers who looked into linguistic relativity also agreed that thought exists independent from language (Lucy 1992; Slobin 2005). Cognitive psychologists also advocated that thoughts exist prior to language and that language serves as a labeling or naming instrument (Gentner & Goldin-Meadow 2003; Piaget 1959). There is also evidence from archeological studies that studied the evolution of the pre-historic mind that suggest that human cognition develops independent from language (Pavlenko 2014).

Pavlenko provides a definition of what is meant by cognition in this respect: 'the processes of attention, perception, and memory' (2014, p.34), and it is therefore a justified position to take when saying that cognition exists independent from language. In fact, Casasanto (2008) stated that most arguments against determinism, and even relativity, stem from mistakenly equating whether we think in language, or whether language shapes thought, which he claims are two separate questions. He further argued that 'language can shape the way people think even if they do not think in language' (2008, p.65).

Benjamin Lee Whorf argued that '[T]he statement that "thinking is a matter of LANGUAGE" is an incorrect generalization" (capitalization in original) (1956, p.239). In other words, unlike the determinism hypothesis, which states that language *determines*

thoughts, the relativity hypothesis, on the other hand, states that thoughts are *relative* to our language(s) and do not equate thoughts with language.

Whorf believed in the plasticity of the human mind and that differences in thoughts and views of the world are *relative* to the language or languages different people speak, and that our language system, or grammar, can *influence* the way people think or view the world.

> . . . users of markedly different grammars are pointed by their grammars towards different types of observations and different evaluations of extremely similar acts of observation, and hence are not equivalent as observers but must arrive at somewhat different views of the world (Whorf 1956, p.221).

Whorf devised a 'weaker' form of the 'Linguistic Relativity Hypothesis' or as he claimed it to be a 'new' one because Sapir's determinism theory was met with such strong criticisms. He advocated a hypothesis that he called the 'Principle of Linguistic Relativity' claiming that languages differ in their view of the world and this in turn influences the way people think, behave, understand, and conceptualize the world around them, resulting in differences in peoples' thoughts. He believed that language as a semantic system of meanings influences peoples' *habitual* thoughts. By habitual thought, Whorf means peoples' everyday thought. In other words, peoples' daily analysis of their everyday lives through their language, and this is where language comes to influence peoples' thoughts, attention, and behaviour, as they become 'linguistically conditioned' (Lee 1997, p.444).

However, although advocated as a weaker version, this hypothesis was also controversial as there were researchers who argued that correlation does not mean causation. In other words, that just because people include certain distinctions of the world over others does not mean that it is due to differences in language. It is not that they conceptualize the world differently; it may be that people according to their language choose to include certain distinctions over others. Hence, some researchers view language as the verbal vehicle of such distinctions and orientations and not the

shaper of such thoughts (Pinker 1994; 2008). However, there are also researchers who agree with Pinker's view that language indeed is the tool where people express different thoughts, but still insist that language still plays a causal role on cognition (Boroditsky 2001; 2010; 2011; Boroditsky et al. 2003; 2011).

Additionally, the reason why this new version of the linguistic relativity hypothesis was received with a number of criticisms was because Whorf offered no empirical data to support his claims, and has neglected to offer empirical tests as to how to test his hypothesis. He merely offered examples, one being the Inuit 'Eskimos' having more than one word for 'snow', which was later refuted; as well as another example being that the 'Hopi' had no concept for 'time', which was also later refuted. Therefore, Brown and Lenneberg (1954) challenged and criticized Whorf's hypothesis due to his lack of empirical data and examples and decided to test the theory using his example of color perception and color codability and its relation to lexical coding and memory. Nonetheless, they managed to find significant correlations providing evidence for the relativity hypothesis of language affecting thought and perception. Conversely, there was also research done by Berlin and Kay in 1969 also on colors and found anti-relativist results (Gentner & Goldin-Meadow 2003; Gumperz & Levinson 1996; Lucy 1992).

However, Brown and Lenneberg's as well as Berlin and Kay's studies both seem to have misunderstood Whorf's theory and unknowingly influenced a new stream of relativity research that focused on language and nonlinguistic thought (Pavlenko 2011a). Their tests relied on people's perception of colors and color codability evident in their testing of the speed and the agreement in the naming of the colors tested, and results were then referred back to differences in language (Brown & Lenneberg 1954). Whorf's relativity hypothesis was focused on people's linguistic thought and not what Brown and Lenneberg had tested, thus unknowingly introducing a new version of linguistic relativity, mistakenly labeled as the 'Sapir-Whorf Hypothesis' instead of the 'Brown-

Lenneberg Hypothesis' (Pavlenko 2014; 2016).

In fact, Lakoff (1990) argued that Whorf's linguistic relativity theory was highly debated, refuted, and criticized because it was misunderstood and often confused and misjudged. He argued that there are hundreds of forms or versions of relativism and vary in many aspects such as the depth, the nature, and degree across the conceptual systems compared, what counts as different, where the differences are located whether in the language or in the mind, and how the issue of translatability plays a part in relativity. Lakoff adopts a Whorfian standpoint, and claimed that the organization of a conceptual system plays a part in the relativity argument that different organizations means different systems and that conceptual systems when used differently, means differences in experience. He also argued about the nature and depth of variation, where most research has been done on kinesthetic image schemas such as up-down, in-out, etc., and on basic concepts and experiences such as basic colors, basic emotions, basic states, etc., and metaphors that are also based on universal experiences, not where people would actually differ. Where they might differ, he argued, is in the organization and use of these concepts. Lakoff continued arguing that he agreed with Whorf in that differences in conceptual systems also affect our behaviour.

To expand Lakoff's and Whorf's view that differences in conceptual systems affect our behaviour, does it also affect the way we feel? In the case of emotions, Pinker argued against the notion that language influences thoughts, and ultimately feelings. Not having an emotion word in a language, he continued, does not mean that people do not feel this emotion, in fact, he argued, they would welcome a new word for it when exposed to new languages. 'I have never heard a foreign emotion word whose meaning was not instantly recognizable' (Pinker 1997, p.367). However, Pinker may be right about not having a word in a language does not mean that people do not feel the emotion, a view that Ekman (2004a) also maintained, but having a foreign emotion word being

instantly recognizable is perhaps too simplified and may only be true to a handful of people who are well read and well exposed and perhaps come from a language where there is a large range of emotion words such as the English language.

Pavlenko (2014) also argued that it is recognizable only because they recognize the English translation equivalent not the actual foreign emotion word. And if having any emotion word being instantly recognizable truly is the case, then language learning would have been extremely easy and no difficulties were to be found in the use or understanding of foreign emotion words, specifically ones that do not have an equivalent in the first language. Pinker's generalization is subjective and may not apply to the majority of language learners. Accordingly, the questions that may rise is whether or not people are introduced to new emotions entirely when learning another language where certain emotions are not salient in their first language, or is it simply new emotion labels that are remapped and redefined in place of the preexisting labels that were available in their first language in their mental lexicon? Pinker (2008) also argued that learning a new word brings forth learning a new concept that adds to our thought, in which it is the concept that we learned not the vocabulary itself.

In addition, even though Whorf's claims of language influencing our thought have long been rejected, one has to admit that his claims have been extremely influential and inspired many researchers to study the effects of language on thought, or in other words, the relationship between thought and language. Nowadays, researchers are revisiting Whorf's work and looking into linguistic relativity. There are researchers who have proposed explanations of the linguistic relativity hypothesis, for example, it was attributed that the accessibility of certain thoughts in a language as the factor that plays a part in the acquisition of new thoughts, rather than language being the shaper of these thoughts (Gumperz & Levinson 1996). In the case of Lucy's (1992; 1996; 1997) research on linguistic relativity, greatly influenced by Whorf's work, he studied habitual thought

and how different languages are affected by enumeration as well as testing cognitive nonlinguistic abilities using shapes and materials. He found differences in how people viewed the projected reality due to the differences between the grammars of English and Yucatec Mayan. Furthermore, like Lakoff (1990), Lucy (1992) also argued that Whorf's claims and theories were misunderstood and that he did not claim that language constrains peoples' world views. It was further argued that Whorf meant that language is more of an 'attention-directing mechanism to specific perceptual attributes of reality' (Athanasopoulos 2009, p.83).

This idea of language directing attention and including specific features more than others is an idea that Slobin (1987; 1996; 2000; 2003; 2005) also advocated in his 'thinking for speaking' hypothesis. Slobin tested children of different languages to explain Whorf's relativity hypothesis and noticed that these children have internalized concepts that are specific to their language, and this guides their attention and memory to different aspects of the same reality. Therefore, he concluded that the language we are born into is 'a subjective orientation to the world of human experience' and that this 'orientation affects the ways in which we think while we are speaking' (1996, p.91). Slobin was interested in the activity of thinking while speaking, as he was interested in the systematic variations between different languages and how they may reflect differences in their attention to certain details and the distinctions their language provides and how they come to organize those details as they speak.

Therefore, the 'thinking for speaking' theory 'involves picking those characteristics that (a) fit some conceptualization of the event, and (b) are readily encodable in the language' (Slobin 1987, p.435). Slobin (2000; 2003) also added that his 'thinking for speaking' theory applies to the 'online' mental activity of processing, formulating and producing, and understanding verbalized events. In a study comparing preschoolers from different languages, it was observed that the grammatical categories in

a given language played a significant role in the construction and the distinctions made in their narratives. Thus, prompting Slobin (1996) to arrive to the conclusion that peoples' experiences are 'filtered' through their language in the process of speaking. Moreover, these filters also play a part in different peoples' memory and selective attention to setting and motion, and how they conceptualized manner, as well as how they seemed to arrive at different mental representations of the scenes (2000; 2003). Even comparing translations of a same text in different languages provided an insight regarding how different languages portray the manner of motion (2000; 2003; 2005).

On the opposing front, some researchers critiqued the thinking for speaking hypothesis as being solely focused on linguistics, arguing that even the analysis itself was also purely linguistic in nature (Athanasopoulos & Bylund 2013). Athanasopoulos and Bylund further argued that this hypothesis must be distinguished from linguistic relativity as two different hypotheses. It was argued that the thinking for speaking hypothesis looks into the linguistic level of representation rather than the conceptual nonlinguistic level, which is more linked to the cognitive representation of the concept or concepts in question. Furthermore, Lucy (1992; 1996) argued that in the linguistic relativity hypothesis, the influence of language on nonlinguistic cognitive abilities can be studied having found evidence of differences in similarity judgments using shapes and materials between speakers of English and Yucatec Mayan. To further understand this argument, Lucy defines thought in his research on relativity as:

> The pattern of *thought* may have to do with immediate perception and attention, with personal and social-cultural systems of classification, interference, and memory, or with aesthetic judgment and creativity. The reality may be the world of everyday experience, of specialized contexts, or of ideational tradition (italics in the original) (1997, p.294).

Therefore, Lucy's idea of thought is the same as cognition, and like most of the previous literature on linguistic relativity, where the effects of language on nonlinguistic cognition were the focus of the research, Lucy advocated testing thought or cognition according to

his definition 'aside from explicitly verbal contexts' (1996, p.48). He called for the independence of language and cognition, whereby it is not important to test the *use* of language when testing one's cognitive perceptions. In other words, he called for testing cognition in nonlinguistic contexts.

As opposed to Lucy's call for the separation of language when testing cognition, Slobin, like Whorf, stressed the importance of language when testing linguistic relativity, and focused on the effect of language on the way people conceptualize their reality *while using language,* i.e. in the form of speaking.

> . . . human beings spend a large portion of their time in linguistic behavior of one sort or another; that is, we are creatures that are almost constantly involved in preparing, producing, and interpreting verbal messages. Accordingly, research on linguistic relativity is incomplete without attention to the cognitive processes that are brought to bear, *online*, in the course of using language (italics in the original) (Slobin 2003, p.158).

Whorf specified a number of times that in his linguistic relativity principle, he is looking at linguistic thought where he clearly stated that he is studying 'thought insofar as it is linguistic'(1956, p.102). Nevertheless to argue against Athanasopoulos, Bylund, and Lucy, using Lucy's definition of thought, memory effects were found in Slobin's (2003) research as well as effects on selective attention even though Slobin was testing linguistic thought and not cognitive thought.

Although Slobin found evidence of effects of linguistic differences on memory and attention, his research provides evidence for linguistic thought rather than cognitive nonlinguistic thought, as the results refer back to elements that are habitually encoded in language acquisition, such as grammar. Slobin (2003) further argued that the cognitive process of planning and organizing thoughts into speech using memory and attention is considered a cognitive insight into the lexicon.

Nevertheless, Athanasopoulos and Byland do indeed have a point when separating thinking for speaking and linguistic relativity as two separate hypotheses since thinking for speaking focuses on the effects of language only while speaking.

Nevertheless, thinking for speaking can be considered as a weaker form of Whorf's hypothesis rather than the one advocated by the likes of Brown and Lenneberg (1954). Both Whorf's relativity hypothesis and Slobin's thinking for speaking rely on linguistic thought, rather than the commonly advocated nonlinguistic or cognitive thought by Brown and Lenneberg's work and their successors where language is not being used.

> Whenever agreement or assent is arrived at in human affairs, and whether or not mathematics or other specialized symbolisms are made part of the procedure, THIS AGREEMENT IS REACHED BY LINGUISTIC PROCESSES, OR ELSE IT IS NOT REACHED' (capitalization in original) (Whorf 1956, p.212).

Whorf is not interested in the nonlinguistic cognitive thought processes and focused on the agreement of the same experience as long as it is linguistic, i.e. his interest lies in the language used in daily life (Lee 1997; Pavlenko 2014).

More and more researchers are now re-emphasizing linguistic thinking or 'language in cognition' (Lee 1997, p.432) and advocating Whorf's original hypothesis. Lee (1997) looks into the Whorfian hypothesis and how it highlights the language-mind-experience relationship and studies the implications this has on language learning and language teaching. Other advocates of researching linguistic thought include Pavlenko (2014; 2016) as she focuses her Whorfian research and arguments on linguistic thought. Nonlinguistic effects may be found in cognitive processes and perception, but it is the focus on the linguistic thought that she calls to research. Pavlenko argues, '[W]hat matters for the purpose of Whorfian inquiry is the way we use linguistic processes, and in particular the obligatory categories of our languages, to reach agreement on the interpretation of a temporarily shared social reality' (2014, p.35). This is not to put down Brown and Lenneberg's call for language effects on nonlinguistic cognitive processes as their version of the relativity hypothesis, albeit largely inspired by Sapir and Whorf, it is interesting to see language effects on linguistic thought as well. Therefore, the relativity argument really depends on which version of linguistic relativity a researcher adopts in their research.

To conclude this survey on linguistic relativity, we come to the realization that even though numerous studies have been done on linguistic relativity where some have managed to find evidence for the hypothesis, and some found the opposite, definitive answers as to whether language affects the way we think remains an open inquiry, which is purely because of the misinterpretation Whorf's linguistic relativity principle as discussed above and the disagreement on which version of linguistic relativity is adopted, the framework, methodology, area of inquiry, and languages in question. This current study argues for the original relativity hypothesis as put forth by Whorf and calls for studying the effects of language on our linguistic habitual thoughts. This study looks at the language of emotions since emotions are considered a habitual daily occurrence in our lives and can be expressed through language. Therefore, this study looks at how language learning plays a part in *influencing* the learners' habitual emotions and emotion expressions in the first language.

This study looks at Kuwaiti Arabic learners of English in different learning contexts when set against native and monolinguals speakers of the respective languages in focus and how they describe the same emotional scenario, especially when faced with an emotion that is recognizable in one language but not the other. Therefore, linguistic relativity in this case is more or less focused on meaning (different conceptualizations of the same emotion in this case), and what conceptualizations and meanings are given to the same emotion from different languages using different words, which ultimately sheds insight to the cultural teachings that comes to be attached to language and meanings. Furthermore, as the focus of this study adopts Whorf's hypothesis on linguistic thought, and even though the area of focus is emotions, although a nonlinguistic element, it looks at the different meanings different languages give to the same emotion by comparing the use of emotion words. In other words, it looks at the language of emotions and how emotions are described in language. Lakoff argued, as previously discussed in this

section, that most relativity research was done on basic and universal themes, one example being basic emotions. Therefore, there needs to be a focus on the differences that may be found in the different meanings and use of these basic emotion concepts, whereby there is a possibility that different conceptualizations of the same emotion might affect the way people perceive emotions. Therefore, this study adopts this argument and tests an emotion that does not belong to the 'basic' family or families of emotion, one that is commonly known as a language specific emotion, as well as testing another emotion which considered as a 'basic' one in both Ekman's and Izard's lists (Ekman 1980; Izard 2007).

2.3.1: Language effect on emotions

Whorf divided human experience into an external field, which may be what the 'isolates of experience' provide as the visual nonlinguistic universal world around us, and an internal field which includes our senses, feelings, and thoughts which may be what give 'isolates of meaning' through language (1956, p.208). Therefore, because our feelings, thoughts, and senses may be culturally influenced via the mean of language, emotions can be interpreted differently through different languages where different language speakers would draw on 'different essentials of the same situation' (Whorf 1956, p.162). Because '[L]earning a new language modifies, extends, and overlays patterns of attention and thought as it brings new ways of talking and thinking into the internalized linguistic system' (Lee 1997, p.463), new emotion words can be acquired into the learner's lexicon, possibly restructuring old emotion words and consequently altering the same emotional concept.

Previous studies have shown that language may have an affect on our senses and perception (Brown 2011; Dingemanse & Majid 2012; Majid & Levinson 2011). Therefore, language in this sense becomes a link between our personal psychology and the culture we live in. These conclusions can be extended to studies on emotion. The

same emotional experience, due to diversity in language, might be interpreted as different realities. Of course, because some languages offer a number of choices of emotions according to how each language categorizes emotions some individual differences might be found. But overall, even the number of choices available is also indicative of differences in languages and therefore cultures, whereby there are languages that offer a large number of emotion words as opposed to those that do not.

Therefore, the speaker has to choose from their options of emotion words in their mental lexicon to describe the emotion or emotional experience or scenario, and 'filter' the one(s) that he/she finds the most appropriate one for that emotional experience. This choice of emotion word reflects the conceptual perspective of the emotion in that language. Contrary to the belief of Whorf's opposers, the absence of a word in a given language does not mean that they do not feel the emotion, but that the interpretations of the emotional experience differ and therefore, have another word or words for it.

An emotional label is not just a verbal label, but it also carries with it meanings, emotional weight, associations, situational and social factors, psychological and personal factors, as well as physiological factors. Therefore, when it comes to learning a new emotion word, where the meaning and associations attributed to this new word differ or may not be available in the first language equivalent, how does this play in the mind of the language learner?

2.4: Crosslinguistic influence

The notion of having a language influence the other due to crosslinguistic differences was further studied by Jarvis in what he called crosslinguistic influence or crosslinguistic transfer (Jarvis 2000a; 2000b; 2002; 2009; 2011; 2012; 2016; Jarvis & Pavlenko 2010; Pavlenko & Jarvis 2002). Although it was argued that crosslinguistic influence should not be labeled as linguistic relativity (Jarvis 2016; Jarvis & Pavlenko 2010; Odlin 2005; 2010), it can be argued that having one language influence the other as

a sort of attention directing or filtering mechanism when attempting to verbalize a given reality or event can be traced back to Whorf's ideas.

Jarvis (2011) defines conceptual transfer around the assumption that different languages have different categorization and construal of concepts and that can influence or transfer onto the other language affecting the conceptual meaning of the same reality. Conceptual transfer can be either language-independent or language-mediated through language socialization (Jarvis & Pavlenko 2010, p.114) and these concepts are either lexicalized, i.e. linked to words, or grammaticized, i.e. linked to morphosyntactic categories (p.115). It was argued that linguistic relativity is beyond language (Odlin 2010), in other words involve nonlinguistic or cognitive influence, this is indeed the case should Lenneberg's, Brown's, and Lucy's versions of relativity be implemented rather than Whorf's. Jarvis also argued that 'linguistic relativity focuses more on the effects of language on cognition, whereas conceptual transfer focuses on the effects of cognition on language use – particularly the effects of patterns of cognition acquired through one language on the receptive or productive use of another language' (2011, p.3). It can be argued that since linguistic relativity in the Whorfian sense looks at language in cognition as explained by Lee (1997), and since conceptual transfer looks at the effects of language learning on how the learner 'refers to experience in another language' (Jarvis 2016, p.615), they can be regarded as quite similar. But while the linguistic relativity looks at the effects of language learning on the conceptualizations of the world, not necessarily as a verbal output, conceptual transfer looks at the effects of the conceptualizations of one language on the meanings and conceptualizations of another language when using that language. Additionally, conceptual transfer looks into the influence that language has on the mind and the possibility of introducing newly learned concepts and conceptualizations should there be an influence of an L2 on the L1, whereby the conceptual transfer hypothesis states that crosslinguistic influence on one

language comes from the concepts and patterns of conceptualizations of the other language (Jarvis 2011).

> The Conceptual Transfer Hypothesis (CTH) assumes that speakers of different languages have somewhat differing patterns of conceptual categorization and construal, and that, in the case of bilinguals and second language learners, these types of conceptualization differences have the potential to transfer across languages – or, more precisely, the conceptual distinctions and patterns of conceptualization that they have acquired as speakers of one language can also affect their use of another language (Bylund & Jarvis 2011, p.47).

Should L2 learners overcome the influence of their L1, this results in an influence of the L2 on their cognition (Odlin 2005). In addition to conceptual transfer, Jarvis also identified another type of influence or transfer: lexical transfer, and is defined as 'the influence that a person's knowledge of one language has on the person's recognition, interpretation, processing, storage, and production of words in another language' (2009, p.99), which occurs in the form of lexical borrowing and codeswitching where one language is activated while speaking in another (Jarvis 2009).

As previously discussed in section (2.2.1) regarding the universal and culture specific features of emotions, the belief that the human mind comes prewired and concepts in the mind are innate and preexistent, is strongly argued against in which Levinson (Evans & Levinson 2009; Levinson 2003; Levinson et al. 2002), for example, believed that differences in languages reflect differences in concepts. Levinson (2003) argued that semantic representation, i.e. the linguistic labels and meanings that are attributed to entities, is distinct from conceptual representation, which is nonlinguistic in nature. He further added that while semantic representation can be close to conceptual representation, they are not the same, and are not universal because languages differ in their semantic structure. He continued to argue that if conceptual representation was universal as many claim, then there would be no differences in semantic representation between different languages, and that is not the evident case around us.

Lakoff (1990) further argued that the conceptual systems that people have are not

innate and they are not born with them; they are acquired through language. Therefore, differences in concepts are reflected in differences in the words and meanings that are attached to those concepts. Assuming that concepts differ with different languages, this would mean that bilinguals and different language learners face different conceptual representations for each of their languages. It was argued that semantic and conceptual representations can be equated only with monolinguals 'whose concepts neatly map onto words' (Pavlenko 2005, p.84), but this case cannot be applied to bilinguals as their representations differ. In addition, a more plausible argument adopts the possibility of the innate biological factor in the perception of reality, but it is with language acquisition, whether the first or the second, cognitive restructuring can occur and therefore modify or restructure the concept according to the language acquired (Athanasopoulos 2011). Additionally, Jarvis and Pavlenko (Jarvis 2009; 2016; Jarvis & Pavlenko 2010; Pavlenko 2009) also maintained that semantic representations differed from conceptual representations, which is why Jarvis differentiated between lexical transfer and conceptual transfer. Conceptual representation involves the structure of the conceptual categories, while semantic representation involves the link between the concept and words, as well as words and their synonyms (Jarvis 2016; Jarvis & Pavlenko 2010).

Sometimes there can be semantic transfer but failure of a transfer on the conceptual level, as an example, in the study done on the concepts of 'privacy' and 'personal space', participants knew the word forms in English but failed to identify the concepts when talking about them in their narratives because the concepts do not exist in their first language (Pavlenko 2002a; 2003a). On the other hand, should there be transfer at the conceptual level, it would entail the restructuring of a previous concept, which can also affect the semantic representation. This is the reason why conceptual transfer can be regarded as a form of relativity while lexical transfer could not be regarded as such. In the case of emotion studies to be reviewed in more detail in the following section of this

chapter, examples of conceptual and semantic transfer can be found in both first and second language influence on one another (Pavlenko 1999; 2002a; 2005; 2008d; Pavlenko & Driagina 2007). The transfer in such studies is regarded as conceptual and is language-mediated which also entailed the restructuring of the semantic representation in which this occurred when participants were using the concept of emotions of one language while speaking in the other. This transfer is also called crosslinguistic influence (CLI) and is the:

> preferred term for a phenomenon more commonly known as *transfer*, which is the influence of one language on another, as witnessed in the language use (both comprehension and production) and other language-related behaviour (e.g., categorization, gesturing, similarity and typicality judgments, reaction times) of both individuals and discourse communities (italics in the original) (Jarvis 2012, p.1).

This idea of having to modify a previously embedded concept in the lexicon when learning an L2 or more and having it influence the L1, or having the L1 influence the learning of new concepts in the L2 provides insight into the language learners mind.

2.5: The language learner's mind - Evidence of transfer and restructuring

In the beginning of the relativity research, most of the studies influenced by Humboldt, Sapir and Whorf were mostly tested on monolinguals, not taking into consideration these theorists' ideas on second language acquisition and how language learning affects the mind. It is only recently that research switched the focus onto bilinguals and language learners in terms of language and thought in an attempt to figure out the relativity argument as well as further study the plasticity and the intriguing marvel that is the human mind. The reason why the focus has shifted from monolinguals to bilinguals is because it has been established that bilinguals and L2 learners differ from the monolingual speakers of their languages not only in their knowledge of their language, but in their minds as well (Cook 2002; 2003; Green 2011; Grosjean 1982; Grosjean & Li 2013). Moreover, as mentioned, theorists behind linguistic determinism and linguistic relativity both highlighted the effects of language learning on one's

thought, therefore, research that looks at linguistic relativity should be applied on L2 learners to study the effects of learning another language on their conceptualizations of the world in their L1 as opposed to the earlier studies influenced by Brown and Lenneberg which focused on monolinguals (Pavlenko 2016). Furthermore, Pavlenko also called for studying emotions from a multilingual point of view using multilinguals, bilinguals, and language learners not only as a topic but as a method as well to understand the connection between the languages that they speak and their emotions in terms of interpretation, perception, and expression (2008a). In addition, and more importantly, to discover CLI effects on the use of another language, looking at bilinguals or L2 learners is a fundamental approach; otherwise the idea of an influence of language on another is nonexistent in the monolingual's mind. The fact that language learners and language users experience emotions in two different languages differently will shed insight to understanding the language of emotions as well as the plasticity of the human mind. Therefore, this study looks at how language learners map new L2 words and novel concepts into their minds. It looks at how the conceptual system of the L1 influences the acquisition of new concepts in the L2, and how the L2 influences the preexisting concepts in the L1.

According to Pavlenko's (2008d) definitions of conceptual equivalence and nonequivalence, to have conceptual equivalence in emotion words, or any concept for that matter, means when there exists a translation equivalent that refers to the same emotional weight in the same emotional setting/situation. In such a case there will be evidence of a positive transfer due to the preexisting concept, and a direct link can be established between the L1 and L2 concepts. To have partial equivalence means that there can be evidence of a positive transfer but also evidence of a negative transfer due to the partial overlap of the concepts. In the case of nonequivalence, learners have to develop new concepts and develop new linguistic categories to map new words to real-

world referents (Pavlenko 2009, p.152). It is important to note that there is a chance that two emotion words may never fully be equivalent as there may be subtle differences.

An example of having partial conceptual equivalence is that *jealousy* in English has a broad meaning in which it also includes *envy* whereby *jealous* can be used where one feels *envious*, whereas in Russian the equivalent to *jealousy* is *revnost* which does not include *envy* in its meaning (Stepanova & Coley 2002; Stepanova Sachs & Coley 2006). Conceptual nonequivalence, on the other hand, is where there is no translation equivalent in the other language such as *frustration* in English having no equivalent words in Russian, Greek, or in Kuwaiti Arabic. Therefore, in instances of language learning, there may be instances of positive transfer in which new vocabulary is internalized and is being used in a native-like manner, and there may be instances of negative transfer where some words may be internalized but are still used in the conceptual manner of the L1 rather than the L2, while some speakers end up stuttering pausing, hesitating, and using nonexistent translations (Pavlenko 2009). There are also cases where learners avoid using a nonequivalent word altogether whereby there may be the chance that it may not have been internalized (Pavlenko 2008d). Pavlenko (2014) also explains the issue of codability which is 'the efficiency with which a referent can be named in a given language' (Pavlenko 2014, p.44). Codability is also the availability or lack of a 'standardized label' for the referent as well as the availability of lexical alternatives (Pavlenko 2011b). There are emotions that are highly codable such as *happy* and those are considered a more standardized label. And there are emotions that are less codable, more likely to be ones that are less frequently used, which may elicit less of an agreement and may generate more alternatives such as *frustration.* Therefore, the same emotion occurring in the same situation can be perceived differently according to how each language frames this emotion and what connotations are attached to it.

Expanding this issue onto Whorf's (1956) relativity principle, he talked about

reaching agreement on the interpretation of a reality, and this agreement is achieved through linguistic processes. People from different languages would arrive at different agreements, a notion that is called intersubjectivity where certain items or realities have 'agreed-upon' names (Pavlenko 2014, p.226). One comes to learn a word by mapping this word to an external referent, whether an object, an action, a feeling, an event, etc. This is called word-to-referent mapping or lexical naming (Jiang 2002; Pavlenko 2011b). The mapping of words onto external referents is a complex process that involves human cognitive abilities in order to map the words as well as retrieve them from a list of lexical references in the mind (Pavlenko 2011b; 2014).

Contrary to previous belief, it is not a simple automatic process of matching words to referents, '[T]he linguistic and physical aspects of 'the outside' constitute an intrinsic aspect of meaning construction, with the mind processing, recreating and (re)naming external reality' (Pavlenko 2011b, p.233). Pavlenko (2011b) explains that even for a native speaker, this can be a difficult process, since there may be differences on the agreement of the name or names of the referent, some have no name and therefore have a range of alternatives that may not suit the referent. Therefore, the task is harder for a language learner, as they face the process of re-naming either by linking the new name to a pre-existing one, changing the entire concept of the referent, or somewhere in between. Therefore, when it comes to the language learner, in order to reach this agreement or intersubjectivity in a new language, new interpretations of the same reality have to be internalized and the existing ones have to be readjusted 'learning once again, what frames to use, with whom, how, and when' (Pavlenko 2014, p.227). It can be seen as rediscovering that objects or feelings in this case have new names. In other words, it is almost as if this learner begins to think in the second language and interpret the reality accordingly. Therefore, in the learner's mind, there might be a shift or a restructuring of interpretive frames to accommodate the new frame.

Research done on bilinguals as well as on L2 learners revealed that language has an effect on their interpretations of the stimuli whereby it was found that there were differences between the interpretive frames of their tested languages and this depended on whether the lexical choices in focus were translation equivalents, partial equivalents, or nonequivalents (Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2008d; 2009; 2011b; 2014; Pavlenko & Driagina 2007). Studies have shown that when an emotion word is encoded in the L2 for example for a certain emotion experience that may not be as salient in the L1, the activation of the L1 when used in the recall resulted in instances of codeswitching in the L2 which resulted in their conclusion that the word-to-referent mapping process is a language-specific one (Pavlenko 2002a; 2011b; Pavlenko & Driagina 2007). These studies have also reported an internalization of emotion words, as words can be acquired while concepts are internalized, as well as the attrition of previously embedded L1 emotions (Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2003a; 2008d; Pavlenko & Driagina 2007).

Previous theories on the bilingual lexicon and language learning put forth models that explained the linking of new L2 words to existing L1 equivalents and so L2 words can access the conceptual store in the lexicon via the L1 equivalents, and a direct link from the L2 words to the conceptual store will strengthen with the increase of L2 proficiency (De Groot 1992; 1993; 2002; Kroll 1993; Kroll & De Groot 1997; Kroll & Stewart 1994; Kroll & Tokowicz 2005; Kroll et al. 2010). Such models, however, fail to explain words or concepts that may not be equivalent in the L1, or perhaps only share partial equivalence.

Therefore, Pavlenko (2009) proposed a modified model, The Modified Hierarchal Model (MHM), whereby she takes into consideration language-specific concepts, shared concepts, and those that are partially shared. The MHM also and most importantly recognizes and explains conceptual transfer and restructuring. Pavlenko (1999; 2003b;

2008b; 2011c; 2014) has identified seven processes that can take place in the bilingual mind when learning an L2 in terms of conceptual restructuring or conceptual change. She first identified a process of *co-existence*, which is where bilinguals maintain the conceptual frames and references of both their languages and use both in a native-like manner. Studies have indeed found examples of co-existence where Vietnamese-English bilinguals would mirror the answers of their L1 and L2 monolingual counterparts in an emotion similarity judgment and triad categorization task (Alvarado & Jameson 2011).

She then identified the process of *L1 influence on the L2*, where bilinguals' performance is directed by the L1 reference when using their L2, where she terms it as 'thinking in L1 for speaking in L2' (Pavlenko 2011c, p.246). It was found that in the case of translation nonequivalence, participants would use their L1 using codeswitching or lexical borrowing when speaking in the L2 and need to use an emotion word that is not available in that language (Panayiotou 2004a; 2006; Pavlenko & Driagina 2007). Or when speaking in their L2 participants would use emotion terms or grammatical categories that may be correctly encoded and used in their L1, but do not apply to their L2 either by the use of literal translations, incorrect meanings, and incorrect grammar (Pavlenko 2002b; 2008d; Pavlenko & Driagina 2007).

Pavlenko also identified the process of *convergence* of both the L1 and the L2 references, where a new domain is created that is different from both the L1 and L2. Another process is *restructuring* where bilinguals slowly shift away from their L1 reference patterns towards an L2 pattern but not fully resembling it, it can be seen as a new element being incorporated to previously existing concepts. Moreover, she identified the process of *internalization* in the case of learning a new concept that may not be available in the L1.

There is also the process of *L2 influence on the L1*, where there would be a shift from the L1 to the L2 conceptual reference frames. An example of such a case was found

in a test using sorting tasks between emotion words *envy* and *jealousy* where it was found that bilinguals performed differently than the monolingual speakers of their L1, suggesting an influence of their L2 on their L1 (Stepanova & Coley 2002; Stepanova Sachs & Coley 2006). Another example would be *codeswitching* to the L2 when speaking in the L1 to use an emotion word that may not be salient in their first (Panayiotou 2004a). Yet another study on Russian learners of L2 English who in the L2 context not only used the L2 structural patterns in their L1 Russian narratives, but also found a significant decrease in the use of the Russian emotion word *perezhivat*, a word that has no English equivalent, in their narratives (Pavlenko 2002a). And finally, Pavlenko identified the process of *attrition* of the L1 conceptual reference, and possibly the *substitution* of the L1 with the L2 concept.

Therefore, it was suggested that in order for language learners to learn emotion words especially those that may not be salient, either in a second or foreign language, all the levels of emotion representation and processing must be restructured:

1. At the linguistic level: where vocal, lexical, and morphosyntactic patterns of emotional expression and identification have to be modified.
2. At the cognitive level: where mental representations of emotion categories and cognitive appraisal have to be altered either in the form of restructuring, expansion, or narrowing, as well as the internalization of new emotion categories that may not be available in the L1.
3. At the discursive and social level: where new social norms and conformities on emotion regulation and emotional display have to be internalized.
4. At neurophysiological level: where changes might occur in physiological states and responses. (Pavlenko 2014, p.253)

Evidence has been found in studies on some of these levels of emotion representation suggesting an influence of language on the learner's mind, thus offering support to

Whorf's claims on linguistic relativity, and support to the crosslinguistic influence hypothesis, whereby examples include internalizing emotion words that offer finer distinctions in certain emotion categories, the blurring of L1 emotion categories, and loss of salience of L1 specific emotion words (Pavlenko 2014, pp.265–266).

2.6: Conceptual nonequivalence in emotion words

This section focuses on studies that have been done on conceptual nonequivalence in emotion words and reviews in depth the most prominent studies and research to date, as they are pertinent to the current study in terms of framework and methodology. Previous studies investigated how language-specific emotion words are learned, interpreted, and used by L2 learners (Dewaele & Pavlenko 2002; Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2002b; 2005; 2008b; 2008d; 2009; 2011b; 2014; Pavlenko & Driagina 2007; Wierzbicka 1992a; 1999).

Pavlenko's (Dewaele & Pavlenko 2002; Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007) research on Russian-specific as well as English-specific emotion words focuses on the monolinguals of each language as well as the L2 learners and bilinguals of these two languages. Using narrative elicitations, she looked into the use of the English-specific word *frustration*, and the Russian-specific word *perezhivat.* The stimuli used in her investigations were short clips that were specifically made for the study. *The Letter* and *Pis'mo* are both short 3-minute visual clips that were silent so as not to have the language affect how the participant perceives the narrative. The story revolves around a woman who receives a letter that upset her, her roommate sees that the woman is upset and goes to read the letter without permission which further upsets and irritates the woman (Pavlenko & Driagina 2007, p.218). However, it is important to note here *The Letter* was an English version whereby it was filmed in America and acted out by American actors, while *Pis'mo* was the Russian version, and although filmed in Ukraine, the participants were lead to believe that it is set in St. Petersburg and was acted

by Russian actors. The participants had to view the clip and were later on asked to spontaneously speak into an audio recorder and recall the story of the filmed narrative. One issue to note regarding having two separate films is that no matter how similar and closely followed the narratives may be, they remain culturally loaded, therefore, might yield different interpretations.

As for the results of Pavlenkos' studies, the first was done on both American English and Russian monolinguals, whereby half of the English monolinguals and half of the Russian monolinguals were shown the short film in the English version and the other half were shown the Russian version (2002b). The two films yielded different results as more emotion lexemes were used to describe *The Letter* than *Pis'mo* by both monolingual groups as well as having some confusions for example between *sadness* and *anger* in *The Letter* but not in the *Pis'mo* narratives. Moreover, differences were found between the American English and the Russian monolinguals.

In *The Letter*, the American English speakers used the word *upset* in all of their narratives to describe the emotional state of the woman, while the Russian speakers mostly used the word *rasstroena* 'upset'. In addition, the American English speakers also used other emotion words to describe the women such as those that fall under the categories of: *anger*, *sadness*, *disgust*, *embarrassment*, and *disappointment*. Most notably the word *frustration* was also used in the narratives of 3 participants out of 20. The Russian speakers also used other emotions words such as those that fall under the categories of: *anger*, *sadness*, *surprise*, and *disappointment*. Furthermore, the Russian emotion word *perezhivat* 'to suffer things through' was used in 6 participants' narratives out of 20. Each of those words used by the language groups were specific to their speakers and were not used nor was ever a close counterpart used with the other language speakers.

As for *Pis'mo*, there was far less agreement depicted in *The Letter*, only 9

Americans described the woman as 'upset', and only 6 Russian speakers identified her as *rasstroena* 'upset'. Other emotions words that were used amongst the American speakers were ones that fall under the categories of: *sadness*, *surprise*, *anger*, and *disappointment*, while the ones used by the Russian speakers were the ones that fall under the category of *sadness*. Also to note, *perezhivat* was also used to describe the women in 3 participants' narratives.

Furthermore, Pavlenko noticed that Russian speakers tended to use more emotionally charged words than their American English counterparts for example *grief* versus *sadness*. It is important to note also that the differences yielded in the responses between the two films may have to do with the fact that they were different, with different settings, and most importantly different actresses, which may result in an entirely different display of the targeted emotion. From this study, Pavlenko also identified the four factors that affect the discursive construction of emotions in narratives namely: cultural (having a familiar context/ culture-specific concepts), social (different interpretations due to social ambiguities), individual (their individual subjective interpretations), and linguistic (passive state versus active state) (2002b, p.234). Although it does not look at crosslinguistic influence or linguistic relativity, Pavlenko's (2002b) study summarized above, established that the American English monolinguals differed from Russian monolinguals in their interpretation of the emotions depicted in the video clips.

In another study, Pavlenko (2002a) investigated the matter with late Russian-English bilinguals who were living in the United States, i.e. the L2 speaking country or in an immersive context. The same stimuli and methods were used to test these participants and results were compared with their monolingual counterparts. The participants had to view one of the films and retell the story in both English and Russian. For those who saw *The Letter*, and similarly to the previous study, the Russian-English

bilinguals mostly used the emotion word *upset* in their English data (9 out of 10 participants) to describe the woman in the film, while *frustrated* was used twice. The other emotion words used to describe the woman fall into the same categories used by the American English monolinguals in the previous study. As for the Russian data gathered from the same speakers who saw the same film, they used the Russian translation equivalent of the English word *upset,* which is *rasstroennaia* (7 out of 10 participants) in their description of the woman's emotion. The other emotion words used in their descriptions also fall into the same categories used by their monolingual peers apart from the Russian equivalents of *surprise* and *disgust*.

As for those who saw the Russian version of the film *Pis'mo*, in the English narratives 3 out of 4 participants identified the woman as *upset*, others included those that fall under the categories of *sadness*, *surprise*, and *anxiety* resembling the monolingual data apart from *anxiety*. As for the Russian narratives, 2 out of 7 participants used the word *rasstroena* 'upset' in their data; others included those that fall under the categories of *sadness* and *anxiety*. Once again, *anxiety* appears in the bilingual data, but not with the monolinguals.

Further to add, results showed that the participants used emotion words that were slightly different in terms of the intensity of emotion words, and with paying more attention to the body than the American English monolinguals, which is a trait similar to the Russian monolinguals. As for the Russian data, some followed the Russian monolinguals in their use of emotion words that carry great intensity, and paying more attention to the body. The lack of use of the language-specific word *perezhivat* (only 1 out of the 17 narratives) indicates a possible sematic shift, and a possible influence of the L2 English on the L1 Russian. However, the use of high intensity emotions and making links between the emotion and the body also indicates that there remains a slight influence of the L1 on the L2, as the participants did not fully behave neither as the

American English monolinguals nor as the Russian monolinguals. The participants in the immersive context of the L2 shifted from their monolingual behaviour both in their L1 and their L2 and provided evidence of a crosslinguistic influence on the use of emotion words in English and in Russian.

In yet another study (Pavlenko & Driagina 2007), this time with advanced American learners of Russian compared with a new set of English and Russian monolinguals, the same influences from the L1 on the L2 and from the L2 on the L1 were found amongst these learners. The study used the same method of narrative elicitation using *The Letter*, and obtained English narratives from native American English speakers, Russian narratives from native speakers as well, and L2 Russian narratives from Advanced American learners of Russian who were learning their L2 in an immersion program at the Middlebury Summer Russian School in the United States.

The American English speakers produced longer narratives, while the Russian speakers displayed more lexical richness in their emotion vocabulary. As for the qualitative analysis of the emotion words used to describe the woman in the film, again as previously seen in the studies above, *upset* was the most used word in the English native speakers' data, along with *angry*, *mad*, and *sad*. Meanwhile, in the Russian native speakers' data, they also mostly used Russian equivalents of *upset*, along with the emotion word *perezhivat*. From the native speakers' data, the American English speakers predominately perceived the woman to be both *angry* and *sad*, while the Russian speakers predominantly saw her as being *sad*. As for the L2 learners of Russian, they produced longer narratives than both monolingual groups, however, they seemed to have used fewer emotion words than the monolingual groups, but still displayed a higher lexical richness in their emotion vocabulary than the American English speakers, almost close to the Russian monolinguals.

As for their lexical choices, there was a complete absence of the emotion word

perezhivat in the learner narratives even thought they were taught in an immersion context, however, the study fails to mention how long they have been studying their Russian, and at what age they started. The researchers argued that the reason is that *perezhivat* is a language and culture specific emotion word and has no semantic counterpart in English to map on to, meanwhile *rasstroenia* can be mapped onto the preexisting emotion word *upset*, making *perezhivat* a harder word to acquire. However, the learners did use the emotion word *angry* and those that fall under its category in their descriptions, resembling the narratives of the American monolinguals in their identification of the emotion. Even in their use of the equivalent of *anger*, they still seemed to have a slight influence of their L1 on their use of *anger* in Russian. In Russian, there are two words for *anger*, *serdit'sia* 'to be angry at someone' and *zlit'sia* 'to feel *angry* for a variety of reasons' which is more or less a more salient form of *anger* to English speakers. However, because *serdit'sia* is more frequently used in Russian, the L2 learners of Russian mapped it onto their English *anger* and used it in contexts where Russian monolinguals did not, and would not normally do. Also, they seemed to have used it when Russian monolinguals did not even use any form of *anger* at all. Therefore, the learners resembled the Russian monolinguals in their lexical richness of their emotion vocabulary, yet displayed an L1 influence in their use of emotion words describing the woman in the film, using different Russian emotion words that are equivalent to *anger* and *upset,* and the absence of the word *perezhivat*, even though it was taught in their L2 classrooms.

The final study (Pavlenko 2008d) also compares the learners with monolinguals of English and Russian, but this time with advanced American L2 leaners of Russian enrolled an intensive immersion program at the Middlebury Summer Russian School, and advanced Russian L2 learners of English in the United States. Moreover, in addition to using *The Letter* as stimulus, the study also used a well-known episode from the

Popular Mr. Bean series called: *Mr. Bean in the swimming pool.* The groups were not to be compared with one another, but rather the L2 learners of Russian and the L2 learners of English were compared with the respective target language group. This study also compares the monolingual and the American L2 learners of Russian narratives elicited from *The Letter* from Pavlenko's and Driagina's study (2007) with narratives elicited from the Russian L2 learners of English group in this study.

Pavlenko analysed a wide range of emotion words such as *joy/fun*, *fear*, and *shame/embarrassment*. It was found that *frustration* was a word that was easier to learn and use with the Russian learners of English, as opposed to *perezhivat* with the American learners of Russian, whereby some L2 learners of English used *frustration* in their narratives of *The Letter*, while none of the L2 learners of Russian mentioned *perezhivat* in their narratives, some even used the English *frustration* in their Russian narratives by means of codeswitching and lexical borrowing.

This difference may be due to the learning context, as the L2 learners of English live in an English speaking country, i.e. the context of the target language, and therefore, had more chances to practice, use, and internalize the language-specific emotion word, as opposed to the classroom context of learning, in other words learning a target language in the context of the L1. Another possibility is that *frustration* may be a slightly more salient concept and more recognizable than *perezhivat*, as it may be easier to define, linked to a slightly more familiar setting as they were in the United States, and perhaps linked to other emotion words that are more likely to appear with *frustration* such as *anger*, *disappointment*, *annoyance*, and feeling *upset*.

From Pavlenko's research summarized above, evidence suggests that words that are conceptual equivalents were easier to acquire. On the other hand, conceptual nonequivalence might be a more complicated matter and may lead to 'instances of negative transfer, lexical borrowing, and avoidance' (Pavlenko 2008d, p.91). Pavlenko's

studies have also established the necessity of comparing the bilinguals and L2 learners with monolinguals of the native language and of the target language to examine and trace possible instances of crosslinguistic influence in emotion word use in the bilinguals' and L2 learners' data. Another observation is the importance of the context of learning of the L2, and its effect on the use of the L2 specific emotion words. Examples from Pavlenko's research showed that those who learned their L2 in the L2 context, i.e. L2 speaking country, tend to resemble the target language monolinguals or shift away from the monolinguals of their L1 in their use of emotion words, while even those in L2 immersion contexts in the L1 speaking country displayed an L1 influence on their use of L2 specific emotion words. Therefore this current study has to look into the context of learning of L2 emotion words and inquire whether L2 immersion contexts in the L1 speaking country hinders or facilitates the internalization of L2 specific emotion words.

There are other studies that investigated emotion words that may be language specific and how learning emotion words in an L2 may have an effect on the L1. Panayiotou (2004a; 2004b; 2006) focused her research on bicultural bilinguals as they experience not only two languages but also two cultures, in which they should identify the emotions she is inquiring about having been socialized in the L2 speaking country. In her research (2004b; 2006) using two same scenarios, one in English and one in Greek, participants were asked how they felt about the main character in the story. They followed the story of Andy in the English story and Andreas in the Greek one, a workaholic who does not have time for his divorced/widowed mother and girlfriend/fiancé and are asked to respond in English to the English version, and Greek to the Greek one. Responses were different as their emotional reaction to the main character of the presented scenario shifted between the two languages, in other words they were each perceived in their cultural context. They felt concern and compassion towards Andreas, but were indifferent and disapproving of Andy, and although the emotion terms

used were not direct translations of the other, they still used emotion terms that were still of the same meaning. There were instances where the participant would codeswitch into English when faced with a translation equivalent that is also culturally nonequivalent, for example using the English word *guilty* to express her emotions when speaking in Greek as the closest translation equivalents available in Greek *ntropi* and *enohi* are not exact cultural equivalents.

In another study using a case study approach with semi-structured interviews, Panayiotou (2004a) looked into the word *stenahoria* in Greek which is loosely described as 'a feeling of doom, passivity, and hopelessness, accompanied by experience of suffocation, being unable to breath, not having enough space' (Pavlenko 2014, p.260), and *frustration* in English in which the closest translation words to it in Greek is *apogoitefsi* 'disappointment', *empodizo* 'to hinder', or *mateosi* 'to cancel'. She argued that although these words may be synonyms of *frustration*, they do not offer the exact meaning of the word, as *frustration* is neither a feeling of *disappointment* nor a feeling of *hindrance* (Panayiotou 2004a, p.8). Panayiotou noticed that when her interviewees needed to use the word *frustration* in their Greek interviews they resulted to codeswitching into English rather than use the available Greek words. Her interviewees even stressed the issue of the untranslatability of *frustration*, below are a few examples:

> . . . something like ***apogoiteftika kai tsantisika*** [disappointed and upset]. Because you can't say ***mplokaristika, empodistika*** [blocked, hindered] . . . there's nothing that you can say that would have the actual original meaning . . . (italics and bolding in original) (2004a, p.8).

> I know that most Greeks in Greece would translate it as ***apogoiteftika*** [disappointed] but I know that that's not enough because you don't have the frustration, frustration has this tension and that's not expressed in ***apogoiteftika*** . . . (italics and bolding in original) (2004a, p.9)

> ***Eknevrismos***, ***aghos***, ***agonia*** [irritation, stress, anxiety or agony] but it's not that, is it? I too find that English because it's more with the times . . . it can express several things in one word . . . (italics and bolding in original) (2004a, p.9)

> ***Htitziamsenos*** [pissed off], no, ***taragmenos*** [disturbed] . . . ***thymomenos*** [angry] . . . but not the kind that goes away but anger that marks you with a more permanent irritation . .

. ***syghysmenos*** [confused] I guess . . . (italics and bolding in original) (2004a, p.9)

Her interviews have concluded that such emotion words are not easily translatable and even the closest equivalent in meaning still does not explain the emotion in question. *Frustration*, thusly is a confusing emotion to define and explain, as it includes elements of *anger*, *disappointment*, *irritation*, *blockage*, *hindrance*, *anxiety*, *confusion*, and *stress* (Panayiotou 2004a, p.10). Some even used a physical description to attempt to explain how it feels. As with *frustration*, some also resorted to bodily gestures to explain the emotion of *stenahoria,* as they could not provide an adequate meaning in English. Therefore, it seems that language-specific emotion words have a physiological bodily reaction that are specific to these emotions in order for one to explain them.

2.6.1: Emotion words and the body

As previously discussed in sections (2.2:B) and (2.2.2), emotions are defined as 'a biologically manifested element (such as blood pressure rising) . . . [and] bounded by a bodily experience' (Panayiotou 2004a, p.4). Indeed, as noted in Panayiotou's research which has demonstrated that emotions are tied to the body as one of the participants was trying to explain the meaning of a language-specific emotion word using her body and how she would feel on the inside: 'in the chest, tight in the chest . . .' and going on to explain: '. . . in the middle of the chest . . . like there's something on top of you and you cannot breathe, like its crushing you' (Panayiotou 2004a, p.12). Similar findings were noted by Wierzbicka's (1998a; 1999) and Pavlenko's (2002b) research on Russian. The latter found connections and observations between the emotion and the body as well as the behaviour for example noting tears or crying, putting hands on the head when grieving, changing facial expressions, frowning, noticing changings in body parts such as the eyes, eyebrows, nose, head, hands, and shoulders as well as noticing gestures more so in the Russian monolinguals' data than the American monolinguals' data (Pavlenko 2002b), providing evidence for Wierzbicka's (1999) claim that Russians have a higher

connection between emotions and their body.

Panayiotou's (2004a) research further inquired where in the body would the participants feel the emotion in question; some of the answers for *frustration* included:

'frustration' is like *stenahoria* because I feel both of them in the same place . . . like here [pointing to the middle of her chest] . . . it's like I feel constricted here . . .for both . . . here . . . [pointing] (italics in the original) (2004a, p.10)

The tension resulting in the need to use physical force to feel relieved. 'it's in the chest but it's in the hands and arms also, maybe because I want to do something about it, like punch someone' (2004a, p.10)

Frustration includes 'a tightness in the body, giving a physical sense of tension, and located in the arms, the throat, the stomach, and the core of the body' (2004a, pp.10–11)

Therefore, it is inferred that emotion words have physiological attributes to help define them, which may also be affected in their display by language or culture. Physiological reactions have been investigated by measuring skin conductance responses using a polygraph (Harris et al. 2003; 2006). However, such research only measured the differences in emotionality between the L1 and the L2 in bilingual speakers. Pavlenko notes that '[T]o say that emotion concepts vary does imply that speakers of different languages have distinct physiological experiences. Rather, it means that they may have somewhat different vantage points from which to evaluate and interpret their own and others' emotional experiences' (2008b, p.150). Pavlenko (2014) introduced the notion of 'feeling for speaking', where the different emotional experiences between the L1 and the L2 in the bilinguals' languages, the language learners in this case, directs them to speak about and perceive the emotional experience in all of its linguistic, psychological and physiological connotations differently. Therefore, research into the language of emotions also must take into consideration the issue of emotions in the body. This study looks at how L2 learners describe the emotional experience by referring to the physiological aspects associated with the given emotion.

2.7: Language effects on affective processing

Seeing that there is a suggestion of language effects on the bilingual mind, where

language learning can either influence the L1 or be influenced by it, researchers investigated emotions from a psycholinguistic point of view and examined the affective processing in the bilingual mind. Affective processing is defined as the 'somastovisceral responses triggered by automatic appraisal of verbal stimuli, which may not register as subjective feelings at the level of higher cognition' (Pavlenko 2014, p.284) whereby 'the emotional meaning of the stimulus emerges in a situated process, where its perceived emotional content and relevance are shaped by the interplay of informational, contextual and individual factors' (p.285).

Researchers looked into emotion words and emotion-laden words in the L1 and the L2 and how they were mapped, represented, accessed and recalled in the bilingual lexicon. Different methodologies and approaches were applied to study how emotion words were mapped and represented in the brain as opposed to concrete and abstract words. Some of these include: recall tasks, translation tasks, priming tests, as well as obtaining concreteness, emotionality, and imageability ratings in both the first language and the second language for concrete, abstract, and emotion words (Altarriba 2003; 2006; Altarriba & Basnight-Brown 2012; Altarriba et al. 1999; Altarriba & Bauer 2004; Altarriba & Canary 2004; Anooshian & Hertel 1994; De Groot 1992; 1993).

They have all arrived at similar conclusions whereby emotion words are mapped, represented, recalled, and memorized differently than other concrete and abstract words of any given linguistic repertoire, and that emotion words are different than concrete and abstract words in both the L1 and the L2. The reason for such differences might be because concrete words have the benefit of 'dual coding', as they combine both a verbal or linguistic label as well as an image for that label (Altarriba & Bauer 2004; Anooshian & Hertel 1994), while this is not the case with emotion words. Therefore, according to the results of such research, it has been suggested that the teaching and acquisition of emotion words in particular in an L2 should be presented in context that is written,

spoken, and visual (Altarriba & Basnight-Brown 2012). Research has also shown that concrete words have higher context-availability 'the ease with which a context or circumstance can be recalled for a particular word' (Altarriba et al. 1999, p.578) than abstract and emotion words (Altarriba et al. 1999; Altarriba & Bauer 2004), and while emotion words do indeed have higher context-availability than abstract words, it occurs more so when tested in the speakers' L1 rather than in their L2 (Altarriba 2003). In addition, research have demonstrated that L1 emotion words are linked to autobiographical memory, and are therefore better recalled than concrete and abstract words, and are better recalled than L2 emotion words and emotion laden words (Altarriba & Bauer 2004; Anooshian & Hertel 1994).

Moreover, different concepts such as the concepts of different emotions from different languages are mapped differently in the mental lexicon and vary from language to language according to each cultural understanding of that emotion concept and such differences might be higher in some words than others (De Groot 1992; 1993; 2002; Grabois 1999; Kroll & De Groot 1997; Kroll & Tokowicz 2005; Pavlenko 2009). Studies using emotional stroop tests and skin conductance response measurements have also shown that emotion words are also felt differently in different languages and are only heightened in the L2 with a higher L2 proficiency and early age of acquisition (Caldwell-Harris & Ayçiçeği-Dinn 2009; Caldwell-Harris et al. 2011; Eilola et al. 2007; Eilola & Havelka 2011; Harris 2004; Harris et al. 2003; 2006; Sutton et al. 2007).

Therefore, we can infer that emotion words are a different class of words than concrete and abstract words in any given language, and are thus represented, accessed, memorized, recalled, and felt differently. Moreover, these studies have also established the importance of looking at L2 proficiency and early age of acquisition as variables or factors that would aid the use and identification of emotion words in the L2. There might be other variables or factors that may also contribute into the ease of the learning, use,

and identification of L2 specific emotion words, as will be discussed below.

2.8: Possible factors in L2 emotion word learning

Most studies have concluded that the following variables affect the learning and use of emotion words in the L2: sociocultural competence, degree of L2 socialization, word type, age, gender, context of learning, age of acquisition, language proficiency, frequency of use of the language, language preference, and language dominance (Altarriba 2003; 2006; Altarriba et al. 1999; Altarriba & Bauer 2004; Dewaele 2004a; 2004b; 2005a; 2005b; 2006; 2008b; 2010; Dewaele & Pavlenko 2002; 2003; Grabois 1999; Jarvis & Pavlenko 2010; Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2002b; 2006; 2005; 2008d; 2014; Pavlenko & Driagina 2007; Rintell 1984; Stepanova & Coley 2002; Stepanova Sachs & Coley 2006). However, these variables varied from one study to another with varied languages, participants, methodologies, approaches, etc. For example, while one study concluded that language proficiency plays an important role in language learning and emotions, another would conclude that proficiency is not as important as language preference. Following is a summary of the independent variables or factors investigated in the learning and use of emotion words in the L2, which is what this study is largely based on.

2.8.1: Language proficiency

Language proficiency proved to be an important factor in most studies, whereby it played an important role in identifying emotions in the L2 and rating their intensity (Rintell 1984). Looking at emotion vocabulary in interlanguage, Dewaele and Pavlenko (2002) looked at the factors that would impact the use of emotion vocabulary in the second language using conversations and narrative analysis and concluded that along with type of linguistic material, degree of extraversion, sociocultural competence, and in some cases gender, the level of proficiency was a key factor. In another study using the bilingualism and emotions questionnaire (BEQ) (Dewaele & Pavlenko 2001), it was

concluded that proficiency was an important variable along with the order of acquisition of the participants' languages that have affected the expression and perception of emotions in the L2 whereas age and gender did not play an important factor in the study (Dewaele 2010). Participants with high L2 proficiency also perceived the weight of the emotion of *love* in the L2 (Dewaele 2008b). Language proficiency also plays an important role in conceptual restructuring evident from Pavlenko's studies on emotions (Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007).

2.8.2: Language dominance

Language dominance, i.e. whether participants find themselves more proficient in their L1 or L2, was correlated with the expression and perception of emotions in the L2 (Dewaele 2010) and was also correlated with the expression of *love*, *anger,* and the force of swear words in the L2 (Dewaele 2004a; 2004b; 2006; 2008b). Studies have shown that most learners remain dominant in their L1, especially with regards to emotions (Dewaele 2010). Language dominance ultimately means the frequency of use of that dominant language, in which dominance entails the frequent activation, access, and use of the language.

2.8.3: Frequency of use of the L2

The more frequently the language is used, the higher the levels of its activation and access (Dewaele 2010), and this is usually the case with those who have more contact with their L2 and use it more frequently. As evident in previous studies on emotions, the frequency of use of the L2 also played a role in the expression and perception of emotions in the L2 (Dewaele 2010), as well as on the force of swear words in the L2 (Dewaele 2004a; 2004b). There seems to be, however, a missing measure to further test how much the language learner uses the emotion word in focus. The more frequently the participants' use the target emotion words, the more frequently they may be activated in their minds, which in turn might facilitate their internalization.

2.8.4: Age of acquisition

The Critical Period hypothesis assumes a critical cut off point mainly around puberty in which language learning becomes a more laborious effort (DeKeyser & Larson-Hall 2005; Johnson & Newport 1989; Lenneberg 1967). Although the hypothesis has proven to be quite controversial and sparked quite the debate amongst many opposers (Birdsong 2005; Singleton 2003; 2005), it sheds light on the importance of age of acquisition as a variable in language acquisition research. Research in second language acquisition provides insight on the importance of age of acquisition in L2 emotion word learning (Dewaele 2010). It was found that the younger the age of acquisition, the more linked the language becomes with the emotional memory (Pavlenko 2007). Dewaele (2010) looked at the variables that have affected the expression and perception of emotions in the L2 from the BEQ and found significant effects of age of acquisition for more than half the cases in his study. Age of acquisition also played a part in the expression of *anger* and in the force of swear words in the L2 (Dewaele 2004a; 2004b; 2006) as well as in the expression of *love* in the L2 (Dewaele 2008b). As for the influence of one language on the other, it was also found that younger age of acquisition is what aids L2 influence on the L1 (Pavlenko 2011c).

2.8.5: Context of L2 learning

As evident from Pavlenko's research reviewed in this chapter, the context of learning of the L2 is an important factor in the acquisition of nonequivalent L2 emotion words as it provides 'authentic language use' (Dewaele 2010, p.56). As opposed to the naturalistic benefits of learning emotions words in their most natural form as with the L1, L2 learning of emotion words may not be as easy and as natural. Those learning their L2 in the L2 speaking country have the benefit of being immersed in the social and interpersonal aspect of emotion learning in the L2 and benefit from greater exposure and of multiple appearances of different emotion words in different situations, either within

their natural context of occurrence or even within formal language classrooms, which would in turn strengthen their semantic representation in the lexical memory (Harris et al. 2006). However, this is not the same case as formal classroom instructions in the L1 speaking country. Most studies have been done in the target language speaking country on bilinguals and L2 learners while little has been known on foreign language learners learning their L2 in the L1 speaking context, especially on the difference between immersion classrooms versus non-immersion classrooms. Reasons as to why and how formal classroom learning of an L2 in the L1 speaking context affects the learning and use of emotion words in the L2 is because the learning of emotion words might clearly differ between the acquisition of the L1 in its naturalistic L1 context, the immersion and acquisition of the L2 in the context of the L2 speaking country also known as the target language context, as well as the learning of the L2 in the L1 speaking country or context.

Epstein's doctoral dissertation from 1915 (in Pavlenko 2011a; 2014) found that for those who have learned their L2 in a communicative setting, their language becomes linked to thought, while those who have learned their L2 via the translation method, their language becomes linked to translation equivalents and would require mental translation. Therefore, the difference between foreign language learners learning their L2 in the L1 speaking country and second language learners who are learning their L2 in the L2 speaking country is that the foreign language learners link their L2 with their L1, and so they draw on the L1 translations for the L2 words from the semantic level. They fail to draw these L2 words from a conceptual level since they mainly use translation and memorization. This proves to be even a harder task when they are faced with nonequivalent or partially equivalent concepts in the L2 (Pavlenko 2008b). Research also showed that when the language is learned and used in the L2 speaking country it becomes the language of inner speech and eventually becomes linked to emotions (Pavlenko 2011a). This is what Harris (Harris et al. 2006) calls the *Emotional contexts of*

learning, whereby the learning of a language in its naturalistic context and using it in this context becomes more emotional than those learned only in the classroom.

As for the previous studies that have established the importance of the context of learning, analysis of the BEQ revealed that the context of learning played a significant role in the expression and perception of emotions in the L2 (Dewaele 2010). The emotional force of swear words was found to be higher when learned in their natural context than when learned in instructed formal language classrooms (Dewaele 2004a; 2004b; 2005b). As far as his studies on *anger*, Dewaele noticed that participants reported difficulties expressing *anger* in their L2 when learned in formal classroom instruction (2006).

Furthermore, in studies on crosslinguistic influence, influence of the L1 on the L2 was seen with the foreign language learners, whereas those who learned their L2 in a communicative setting in the L2 speaking country lead to the internalization of the L2 concepts whereby the interaction and exposure to the L2 proved to be an important factor (Jarvis & Pavlenko 2010). As evident from Pavlenko and Driagina's research (2007) discussed earlier in this chapter, proficiency alone was not enough, and that the context where the participants learned their L2 plays an important role as well whereby it was found that the foreign language learners resembled the L1 monolinguals, while the L2 learners in the L2 contexts resembled the L2 monolinguals, even those who learned their L2 in immersion contexts.

Other studies on translation equivalents such as looking at the word *upset* in English and its Russian equivalent *rasstraivat'sia* revealed that being exposed to the L2 context, i.e. target language speaking context, whereby bilinguals, foreign language learners, and L2 learners were tested, did not have an effect on their lexical choices as the new forms are mapped to previously existing ones. However, when it comes to nonequivalent emotion words, the context of learning did have an effect on the

internalization of the new words, and this was evident in the performance between the L2 learners who have learned their L2 in the target language context and used them resembling the target language speakers' data, as opposed to the foreign language leaners who did not, even though they reported having studied them (Pavlenko 2002a; 2008d; 2011b).

Research on bicultural bilinguals has also found that having been socialized in both cultures of their respective languages enabled the internalization of the nonequivalent emotions as they were able to differentiate and describe nonequivalent emotions in both their L1 and L2, which ultimately means that socialization in the L2 speaking country helps with the internalization of L2 emotions (Panayiotou 2004a).

Studies have shown that socialization in the L2 can be as equal to the L1 in emotional resonance (Pavlenko 2005). A study on late bilinguals showed the significant effect of context of learning and L2 socialization, and provided evidence of conceptual and structural shifts between the L1 and L2, for instead of using the L1 specific concepts, participants used concepts that are L2 specific and portrayed not only semantic but also morphosyntactic transfer (Pavlenko 2002a). In yet another study on interpretive frames, it was reported that foreign language users used L1 interpretive frames, while L2 users used internalized interpretive frames in the L2 and L1 (Pavlenko 2003a; 2011c; 2014). When learning in the context of the target language, it also brings forth the opportunity of L2 socialization, which is another factor in emotions in the L2 as it aids the learner to be more competent in his/her target language. Not only that but also, it is important to also look into the different teaching contexts of the L2 in the L1 country; it is important to look at the differences between immersion L2 classrooms as well as FL classrooms in the L1 country where they have different teaching approaches and concentration. Therefore, this study will look into two different L2 English language teaching contexts in Kuwait, the L1 speaking context, and whether or not the immersion and non-

immersion contexts of L2 learning lead to the L1 influence of L2 specific emotion words, and whether or not evidence of L2 influence on the L1 emotion words can be found.

2.8.6: L2 socialization

The degree of L2 socialization is a significant factor in the expression and perception of the emotions in the L2 (Dewaele 2010; Pavlenko 2006), as it brings forth the learning to act, behave, and suppress emotions according to the L2 culture (Harré 1986). Effective socialization in the L2 can help achieve target like understanding of emotions (Grabois 1999; Pavlenko 2005). L2 socialization proved to have an effect on the language of emotions found in bilinguals who learned in the L2 learning context and socialized in the L2 as opposed to bilinguals who learned their L2 in their L1 context (Stepanova & Coley 2002) This was also evident in the case of bicultural bilinguals seen in the cases studied by Panayiotou (2004a; 2004b; 2006). Therefore from these studies, we infer that L2 socialization can facilitate the internalization of new concepts, namely the nonequivalent ones.

2.9: Summary

This chapter commenced with an overview of the many approaches and arguments regarding the nature of emotions, surveying the many arguments from the universal/cultural nature of emotions debate and tracing numerous linguistic examples. This overview then places this study within an inclusive definition that describes emotions as a natural, biological, physiological, cognitive, cultural, and linguistic experience. The chapter then surveyed the history and the many debates behind the linguistic relativity hypothesis and defends it as one that looks at the language speaker's habitual linguistic thought, and how language might have an effect on our emotions and our verbal emotional expressions. Therefore, this research adopts the Whorfian standpoint in linguistic relativity and looks at the language of emotions between Kuwaiti Arabic and English and how Kuwaiti English learners come to learn English specific

emotion words. As this study looks into the language of emotions by focusing on L2 learners, it looks at the influence L2 learning has on the perception and interpretation of emotions in the L1, and how the L1 might have an influence on the learning of emotion words in the L2 when learning the L2 in immersion classrooms in L1 speaking contexts. The chapter then discussed the crosslinguistic influence hypothesis, which is what this study is largely based on and then discussed the language learners mind providing examples of linguistic influence. Following, it then provided an in depth summary and reviewed research on conceptual nonequivalences in emotion words, emotions and the body, linguistic affective processing, and finally ended with the possible factors that might affect L2 emotion word learning. As this thesis looks at how L2 learners perceive the same emotional experience in their L1 and L2 and the possibility of a crosslinguistic influence in foreign language classrooms in Kuwait, a background to the study in terms of English language teaching and learning in the Kuwait will be introduced in the following chapter.

Chapter 3: BACKGROUND to the Present Study and RATIONALE for Research

3.1: Introduction

'*I was told by an Arab woman of her delight on learning the English word frustration, because her native language provided no word for that feeling*' (Russell 1991, p.426). This indicates that emotions are essentially a psychological experience experienced in our minds and sensed in our bodies, which was explained more in depth in Chapter 2 section (2.2). Even though they may be a nonlinguistic experience, emotions are often communicated via language, which eventually gives them a linguistic quality. Languages differ in how these emotions are encoded and what labels are provided for emotional experiences according to the culture they come from.

This research examines English language learners in Kuwait and whether or not there is evidence of CLI effects when learning partially equivalent and nonequivalent English emotion words in foreign language classrooms. This chapter introduces the background to the present study and rationale for research. The chapter begins with the rationale for the present study and discusses the aims and objectives of this study. The chapter then introduces and discusses the theoretical framework that is adopted for the present study in terms of methodology and analyses. The chapter then provides the contextual background and discusses English language teaching in Kuwait. It also examines L2 English classroom observations in Kuwait. The chapter finally concludes with the research questions paving the way towards the discussion of the methodology in Chapter 4.

3.2: Rationale for the present study

It was often questioned how language learners come to learn L2 words that have no translation equivalents in the L1, and the issue of emotion words has been quite popular in recent research as previously noted in Chapter 2 section (2.6). Moreover, it

was questioned whether or not the learning of emotion words that do not have L1 equivalents can influence the way people perceive and interpret the emotional situation that is prototypical of the any given emotion word in the L2. Therefore, this study aims to provide evidence of whether or not the introduction of new emotion concepts via L2 learning in foreign language classrooms can influence the way emotional situations are interpreted and expressed in both the L1 and the L2.

Furthermore, and more importantly, this study highlights the importance of the context of learning of L2 emotion words since partially equivalent and nonequivalent L2 emotion words can complicate the communication of emotions in the L2. By looking at English language learners from two different L2 teaching approaches, i.e. immersion and non-immersion, in Kuwait, in the L1 foreign language context, this study aims to further inquire about the possibility of crosslinguistic influence, namely an influence of the L2 on the L1 since the studies that have been done on CLI and emotions in L2 classrooms in the L1 contexts only found evidence of L1 influence on L2, but no evidence of L2 influence on the L1 when examining nonequivalent emotion words (Pavlenko 2008d; Pavlenko & Driagina 2007). Therefore, this study inquires whether the learning of the L2 in the L1 contexts hinders the internalization of L2 specific emotion words. In addition to the context of learning, this study also aims to discover the possible factors and variables that might affect L2 emotion word use in the L1 contexts, thus providing possible pedagogical implications and suggestions depending on the outcome of the study.

Additionally, there are studies, as surveyed in the pervious chapter, that have shown the effects of culture and language on emotions, and these effects are evident in the different emotion words and different concepts that are attached to these words in different languages. These differences are also reflected in how differently languages pay attention to the connection and projection of emotions in the face and body as noted in the previous chapter. Therefore, this research also serves as a psychological and

physiological investigation between emotions in English and in Arabic by looking at how similarly or differently emotions are reflected in the body by comparing how participants interpret the emotional display of the target emotions and emotion words and how they explain their own physical reactions in English and in Arabic.

3.3: Theoretical framework

Under the umbrella of Whorf's original linguistic relativity hypothesis and the crosslinguistic influence hypothesis, this research contributes to the controversial debate of linguistic relativity, i.e. whether or not language has an influence on the way we think, and consequently feel as speakers of two different languages. This research examines the influence the L1 has on the learning of emotion words in the L2, and how the learning of L2 emotion words can influence the L1 conceptualization of emotions. This mainly attempts to provide evidence for crosslinguistic influence, but it could also be taken as evidence for the linguistic relativity hypothesis as well. Due to the nature of the investigation, i.e. examining the influence language has on another language in the mind of the language learner, and how the same emotional situation is perceived between two different languages, such differences could be attributed to the influence of language on the use of another. This research revolves around whether language learning, in other words the learning of new emotion words and concepts, has an effect on the way we perceive *frustrating* or *exciting* situations in the L1 and the L2. The crosslinguistic transfer hypothesis and approach in language influence in bilingualism and second language acquisition research is probably the most plausible framework to adopt considering the nature of the current study (Jarvis 2000a; 2000b; 2002; 2009; 2011; 2016 Jarvis & Pavlenko 2010; Pavlenko & Jarvis 2002).

In fact, Pavlenko (2000a; 2000b) stated that crosslinguistic transfer is a good framework to show difficulties in L2 acquisition, and since one of the objectives of the current study is to contribute to the fields of language acquisition and pedagogy, this

theoretical framework seemed the most suitable to apply and extend to foreign language classrooms in Kuwait. Furthermore, it aims to look at the 'verbal construction and verbal expression of meaning' (Jarvis 2011, p.1), and deals with crosslinguistic differences that may result in crosslinguistic influences on the mind. This will provide insight into the learner's mental lexicon, the effects of language, as well as suggestions for foreign language acquisition and L2 teaching.

This approach therefore will further aid in providing insight to linguistic relativity, and even though it was argued that linguistic relativity only deals with nonlinguistic and cognitive thought (Jarvis 2016), it was also argued that Whorf's relativity deals with linguistic thought (Pavlenko 2014). Nevertheless, since this study looks into emotions, I find that studying emotions combines both a linguistic element found in the language specificity of some emotions to certain languages, and a nonlinguistic element due to its perception and its biological and physiological nature. Therefore, offering insight to both sides of the relativity argument as it looks at both the linguistic and the nonlinguistic thought, despite the lack of a scientific experiment.

To explore the nonequivalences on the emotion words intended for this study between the languages in question, various methods of data collection will be applied using various questions on the various aspects of what constitutes an emotion, such as the physiological and the psychological feelings when going through the said emotions, the displays of the emotions, as well as the situational factors that might trigger such emotions. This perhaps will contribute to the definition and understanding of these emotions, and on a broader level aiding the teaching and learning of emotions in another language.

Most studies on emotions and second language acquisition have been done on languages such as Russian, Greek, Chinese, and Japanese. Therefore, they may not be generalized to explain the majority of different languages and cultures such as when

comparing English with Arabic, especially in the case of learning English in an Arabic speaking country. For example, in the case of Kuwait, a higher Standard form is available in addition to the colloquial dialect, where there is a slight disconnect in the use of the two forms, adding to them English as a foreign or second language that is different in its cultural and linguistic background. Furthermore, researchers on emotions and language also face a number of problems when venturing into research of this sort. Firstly, emotion terms lack standards for crosslinguistic and crosscultural comparisons leaving any conclusions facing critique and most often challenged. Moreover, conclusions cannot be generalized as there are no standards for comparison, and also the samples, subjects, and situations are rarely equivalent (Panayiotou 2001). Another issue that this present study faces is the scarcity of sources and literature to consult regarding emotion words, definitions, frequencies, grammar, and use in Modern Standard Arabic and in Kuwaiti Arabic, which ultimately made this study difficult to base on previous Arabic literature considering its nonexistence. Kuwaiti and Arabic will be used interchangeably hereafter to refer to Kuwaiti Arabic unless otherwise stated.

3.4: English language teaching in Kuwait

This study looks into the learning of emotion vocabulary in a foreign language where the two languages in focus are genetically unrelated, and the cultures greatly differ. This investigation focuses on the Kuwaiti dialect of Arabic as the L1 and English as the foreign language (FL/L2), set in the L1 context. More importantly, this study investigates the learning of L2 specific emotion words in the same foreign language context, in other words, the learning of L2 emotion words in the L1 speaking country by comparing immersion and non-immersion foreign language classrooms. In Kuwait, the formal language is Modern Standard Arabic and the colloquial Kuwaiti Arabic is the language that is commonly used in daily life, as Modern Standard Arabic is considered to be too formal and is thus mainly used in more formal occasions such as speeches, news

broadcasts, newspapers, and Arabic language teaching classrooms. The Kuwaiti dialect is a variety of 'Gulf Arabic' that is of 'Bedouin' descent such as the dialects of Bahrain, United Arab Emirates, Qatar, Saudi Arabia, etc. and is heavily influenced by Iraqi, Persian, Urdu, Italian, Portuguese, and others (Holes 2011). Words in Kuwaiti differ from Modern Standard Arabic as it is rarely, if ever, used in daily communication.

In Kuwait, the English language is used and taught as a FL/L2, taught from the very first grades in school up until the final years of university. English is taught in both in the public and private sectors of education; however, the concentration differs in each sector. Private schools (hereafter known as immersion classrooms) are either British or American schools. They are considered immersion classrooms because English is the main language used to teach and communicate where almost all of the subjects in the said schools are taught in English, apart from Arabic language and Islamic religion. English is also the language of communication both in and out of the classroom. Furthermore, most of the teachers in these immersion schools are native speakers of English. Moreover, students who are non-Kuwaiti also attend school in the private sector, some are native speakers of English, and while others may not be native speakers of English, they speak English as their L2. Hence, these students are intermixed with the Kuwaiti students. Most of the students who graduate from these schools have a very good grasp of English as their L2, and have a high level of L2 proficiency.

On the other hand, the public sector of education (hereafter known as FL classrooms) is less concentrated on English, i.e. non-immersion. English is not the language in focus for it is allocated a total of five hours a week, a one-hour daily class. The dominant language in these schools is Kuwaiti Arabic and is used for both teaching and other forms of communication. These classes are mostly taught by non-native speakers of English with high English language proficiency; teachers' nationalities range from Kuwaiti, Egyptian, Indian, Syrian, and Sudanese. New English vocabulary is

mostly introduced and taught through L1 translation and memorization. Furthermore, new words are also translated into Modern Standard Arabic using a dictionary when faced with words that are difficult to translate into the L1, i.e. the Kuwaiti dialect as well as into simpler English synonyms.

Most of the language teaching in foreign language classrooms link new concepts in the L2 to previously embedded concepts in the L1, in other words linking L2 words to existing L1 translation equivalents (Kroll 1993; Kroll & De Groot 1997; Kroll & Stewart 1994; Kroll & Tokowicz 2005; Jiang 2000; 2002; 2004). As mentioned in the previous chapter (section 2.4), recent studies established that there is a difference between the semantic knowledge and the conceptual knowledge of the word whereby the semantic knowledge is the linguistic meaning of the word, while the conceptual knowledge can be seen as the conceptual meaning that is attached to a word (Jarvis 2009; Pavlenko 2005). These studies negate any possible assumptions that all word meanings are shared between different languages, because the concepts of the same word can differ. Therefore, linking a new concept that is abstract in nature to a different or rarely used L1 equivalent might serve as a problematic strategy in foreign language education. In Kuwait, for example, Modern Standard Arabic is not as common as Kuwaiti Arabic, and relying on introducing new meanings and new concepts by linking the L2 words to Modern Standard Arabic using dictionary translations serves as a faulty approach in foreign language teaching. Emotion concepts differ from the simple notion of linking one meaning to another, and when considering emotion words being a different class of words and different concepts than other words, this proves a harder task for the student to grasp when relying on translation and memorization in foreign language classrooms. Not only that but also, when faced with a concept that has no equivalent in the L1 and is specific to the L2, this task is made even more challenging for the student. Hence, it is important to look at the current pedagogical approaches and how they may differ in the

different schooling systems in Kuwait. This will provide an understanding of the pedagogical approaches in L2 emotion word teaching, and further aid with any pedagogical suggestions and implications to be proposed at the end of the study.

3.4.1: Classroom observations in Kuwait

Classroom observations from both private schools (immersion classrooms) and public schools (FL classrooms) were needed to understand the differences between the two teaching sectors in terms of teaching English as an L2 as well as to obtain an idea on the differences or similarities in their approaches to the introduction and teaching of emotion words in English. Therefore, both the immersion classrooms and the FL classrooms were observed to provide insight on differences in foreign language teaching. The classes observed for this study were those dedicated to teach 12^{th} grade students also known as high school seniors. English language classrooms were observed in each of the following: immersion classrooms, all girls FL classrooms, and all boys FL classrooms, as public schools are gender segregated. Nine different schools were visited, 3 of which were immersion classrooms (3 hours total), and 6 were FL classrooms due to the segregation (6 hours total). They were from different areas in Kuwait to ensure the sample would be representative of the whole population. As for the immersion classrooms, one of the visited schools applied the British educational system with British teachers, another applied the American educational system with American teachers, and another although applied the American system, had a mix of American and British teachers.

In the immersion classrooms, native speakers of English taught English to the students. They mostly looked into English literature and analysed novels, poems, and literary plays. The students were encouraged to express their opinions, discuss the literary piece in focus regarding how they felt about it and how they felt about the characters. Not a single word was used in Arabic whether in Modern Standard or

Kuwaiti. Any translations were mostly provided for archaic and old English words and they were given simpler English synonyms of the words. Each classroom only differed in the literary material that was taught, as they mostly relied on reading the material at home and coming back to analyse and discuss it together with the teacher in class. Any homework given included: to continue on reading the following chapters or sections, write a reader response report, or write an in-depth character analysis.

In the FL classrooms, both the girls and boys schools were very much the same in terms of pedagogical approaches and teaching material. One thing that was different was that the number of Kuwaiti English language teachers in the girls' schools was much higher than in the boys' schools. Most of the teachers in the girls' schools were Kuwaiti; very few were Egyptian or Indian. As for the boys' schools, the case was the opposite whereby most of the teachers were Egyptian, Sudanese, and very few were Kuwaiti. Further to note, male teachers taught the male students, while female teachers taught the female students. Apart from these differences, the classes were run in approximately the same fashion. Students would read aloud the text with the teacher, and then answer questions that followed regarding the text. Any new vocabulary they came across, the meaning in English was first given, in other words, a synonym that they already know and is most likely linked to their L1. Some teachers also showed a picture. On two occasions in two different classrooms out of the 6 hours spent in the FL classrooms, the teachers asked the students of the meaning in Arabic, in which as preparation for the class they had to look up the words in an English-Arabic (Modern Standard Arabic) dictionary at home. Some classes did a short literature session taken from their textbook, where they would read an abridged version of a classic English novel such as *Tom Sawyer* or *Gulliver's Travels* with the teacher, and as with the other classes, they would answer short questions on the details of the story. Homework included answering more questions on the textbook or the workbook, preparing for next classes and looking up the

meanings of new words, and writing a summary of the story they have read.

After FL classroom observations, the teachers ($N = 6$) sat through a short interview to further understand their pedagogical approaches with focus on the introduction of L2 specific vocabulary. The questions revolved around:

- How they introduce new vocabulary.
- How they translate new vocabulary: English to English synonyms, English to Arabic, etc.
- Whether or not they put the words in context and whether they use the L1 context or the L2 context. The kind(s) of situational and cultural contexts they would use.
- Whether or not they translate the words for the students or whether the students were translating the words themselves.
- Which form of Arabic (Kuwaiti Arabic or Modern Standard Arabic) they use when translating the words into the L1.
- How they introduce or teach abstract words such as emotion words in English.
- How they teach words that have no equivalent in the L1.

The teachers all agreed that it is now the Ministry of Education stipulation that Arabic is to be avoided in English language classrooms, and that synonyms were given in English instead, but they would still ask the students to provide Arabic translations just to ensure that they have understood the word. Arabic translations are mostly in Modern Standard Arabic as it is what is provided in the dictionaries. However, some students give Kuwaiti translations, and this was indeed observed in the classroom visits as well. The context they rely on is the actual text they are reading, or they might relate it to an L1 context. New words are mostly memorized in a list provided for each unit, (a unit is a number of texts revolving around the same subject matter, for example, the Arabian Desert, weather, etc.). When asked about abstract concepts or words that may not have an equivalent in the L1, the teachers seem to agree that they might give away the closest

Arabic equivalent if the students did not seem to understand the provided English synonyms, whether in Modern Standard Arabic or Kuwaiti Arabic depending on the dialect of the teacher. Also, they would put the word in context to try to explain the concept and have the students understand it.

In sum, the main differences between the two teaching sectors are: the amount of English language concentration, as well as the fact that the students in immersion classrooms are provided with an opportunity to socialize in the L2 and to discuss the emotional aspects of the lesson with a native speaker. The students in FL classrooms, on the other hand, mainly focus on the details of the lesson and are taught by non-native English teachers who are highly proficient in English.

3.5: Research questions and hypotheses

Based on the background and the rationale discussed in this chapter, the following research questions were posed. They all revolve around the overarching question: How does the availability or lack of a translation equivalent affect the lexical choices in the L1 Arabic and the L2 English of Arabic speaking L2 learners of English when presented with the same emotional situations in immersion and non-immersion foreign language classrooms?

Question 1: Is there a difference between the English native speakers and the L2 English learners (immersion and non-immersion) in their English emotion lexical choices when describing the same emotional scenario? And is there a difference between the monolingual Arabic speakers and the L2 English learners in their Arabic emotion lexical choices

Question 2: Is there evidence of L2 influence on the emotion word choice in the L1? Is there evidence of L1 influence on the use of L2 specific emotion words?

Question 3: What are the variables that affect the learning and use of L2 specific emotion words in the L1 speaking context for the immersion learners and the FL learners?

Question 4: Is there a difference between the English native speakers and the monolingual Arabic speakers in their descriptions of the emotional display (physiological reactions) of the emotion when describing the same emotional scenario? Is there a difference between the monolingual groups (English and Arabic) and the L2 English learners (immersion and non-immersion) in their English and Arabic descriptions of the physiological display of the target emotions?

To further explain and discuss the research questions above since this study focuses on language learners of different learning contexts and different proficiencies, Question 1 looks at the differences, if any, by comparing the different groups of participants. The similarities and/or differences in the participants' lexical choices can be traced back to the prototypical lexical choices of the two languages by comparing the focus groups against the control groups (further information on the participants can be found in Chapter 4). Moreover, by comparing different learning contexts, immersion and non-immersion, it contributes to foreign language pedagogy. Having the English native speakers as a control group, this study predicts that these English native speakers would identify the emotional situations and express them with the target emotion words *frustra(tion)* or *excite(ment)*. This is due to the presented situations being prototypical of the said emotions (which will be introduced in Chapter 4 where the methodology will be discussed in further detail), as well as the emotion words being readily available in their language. As for the non-immersion learners, they might resemble the Arabic monolinguals in their emotion descriptions, the other control group in this study, and differ from the native speakers of English. As for the immersion learners' emotional descriptions, previous studies found that depending on the equivalence/nonequivalence

of the emotion words in question, their use of L2 emotion words might be similar to the emotion words used by the native speakers in cases of partial equivalence, but not in cases of nonequivalence.

Hypothesis 1: In the case of *excitement*, no differences will be found between the immersion learners' use of L2 English emotion words and the emotion words used by the English native speakers. Meanwhile, the non-immersion learners' English answers will differ slightly from the English native speakers. No differences will be found in the L2 learners' use of Arabic emotion words when compared with the Arabic monolinguals. In the case of *frustration,* both the immersion learners' and the non-immersion learners' use of English emotion words will differ from the native speakers of English, while no differences will be found in their use of Arabic emotion words.

As for Question 2, which is also related to the question above, it focuses on the emotion words chosen to describe the presented emotional scenarios in the L1 and the L2. These emotion words are then compared, whereby if the lexical choices in the L1 and the L2 resemble those of the native speakers of English and differed from the monolinguals in Arabic, this can be seen as evidence of an influence of the L2 on the L1. Alternatively, if the answers in the L1 and the L2 resemble the Arabic monolinguals and differed from the lexical choices provided by the native speakers of English, this can be seen as evidence of an influence of the L1 on the L2. It can be hypothesized, based on previous studies of similar focus, that there will be an Arabic language influence (L1) on the L2 English descriptions of emotions. As for the possibility of English language influence (L2) on the L1 Arabic descriptions of emotions, previous studies have not found such influence on the use of L2 specific emotion concepts.

Hypothesis 2: In the case of *excitement*, there will be an L1 Arabic influence on the L2 English descriptions of emotions in the non-immersion learners' data but not among the immersion learners where there will be an influence of their L2 English on

their L1 Arabic descriptions of emotions. In the case of *frustration*, there will be an L1 Arabic influence on the L2 English descriptions of emotions, but no influence of the L2 English on the L1 Arabic descriptions of emotions in both the immersion and non-immersion learners' data.

As this study deals with language learners, Question 3 looks at the factors that may have affected the learning and use of L2 specific emotion words to provide suggestions for foreign language pedagogy, whereby as inferred from previous studies, the following variables might play a key role in the identification and use of the emotion words in question: the context of learning of the foreign language, English language proficiency, the frequency of use of the foreign language, and the age of acquisition of the foreign language.

Hypothesis 3: English proficiency, the context of learning of English, the frequency of use of English, and the age of acquisition of English will facilitate the identification and use of the emotion words *excitement* and *frustration*.

And finally, Question 4 focuses on comparing the participants' different observations of the emotional display of the target emotion words in the L1 and the L2 and comparing their references of the emotional display with L1 speakers of the respective languages in question. The emotional display is more likely to be in the form of the characters' physiological reactions in the video clips and any references to the physical aspect of the emotions in question. This question looks into the relation of emotions and the body, and examines the effect of L2 learning on the physiological aspect of emotions when learning L2 specific emotion concepts. Previous studies have found differences between languages in their references to the physiological aspects of the emotion in question (Pavlenko 2002b; Wierzbicka 1998a; 1999). This question aims to investigate whether or not speakers of Arabic interpret these physiological aspects versus the native speakers of English, and how learning L2 specific emotion words

affects the interpretations made by the L2 English language learners in foreign language classrooms.

Hypothesis 4: Differences will be found between the L2 learners and the English native speakers in the L2 English observations on the physiological display of the emotions in question, and no differences will be found in the L2 learners' Arabic descriptions when compared with the Arabic monolinguals.

3.6: Summary

This chapter presented the background of the present research as well as the aims and objectives and explained the selected theoretical framework paving the way into introducing and explaining the questions this research ultimately aims to answer and provide evidence for. As inferred from the presented research questions, they all revolve around answering whether or not learning another language can influence the way we perceive and express emotional situations when there is a lack of an equal translation and conceptual equivalent in the L1. The research questions also focuses on the comparison between two different foreign language learning contexts namely, immersion and non-immersion, and whether or not evidence of CLI can be found on the use of L1 and L2 emotion words. Consequently, there has to be a planned scientific methodology to gather a sufficient amount of data in order to answer such a question, which will be illustrated in the next chapter.

Chapter 4: METHODOLOGY

4.1: Introduction

This chapter first introduces and discusses the target emotion words intended for this study, namely *excitement* and *frustration.* The chapter then moves on to discuss the pilot study that was devised to test whether or not the chosen instruments are adequate. Afterwards, the chapter then introduces and discusses the main methodology for data collection in terms of materials, procedure, participants, and then concludes with the methodology for data analyses.

To reiterate, emotions are situational and contextual experiences and are displayed as somatic physiological states (Pavlenko 2005). In addition to being conceptual entities, emotions are also linguistic in nature. This study aims to look into whether there will be an influence of language either the L1 on the L2, or the L2 on the L1 on how L2 specific emotions are perceived and expressed between English foreign language learners from different contexts and different L2 proficiencies. Therefore, this study applies the crosslinguistic influence hypothesis as an approach and framework for the methodology and analyses.

In order to test crosslinguistic influence, it was recommended to test two different groups or levels of language learners undergoing the same tasks in the same manner and in the same conditions (Jarvis 2000a; Jarvis & Pavlenko 2010). Most studies that have been done on crosslinguistic influence and emotions compared L2 learners of both the languages in question, for example Russian learners of English, and English learners of Russian against one another (Panayiotou 2004a; 2004b; 2006; Pavlenko 2008d), while others compared bilinguals with monolinguals of the respective languages (Alvarado & Jameson 2011; Pavlenko 2002a; 2002b; Pavlenko & Driagina 2007; Stepanova Sachs & Coley 2006). Other crosslinguistic influence studies have also compared different L1 speakers learning the same L2 (Jarvis 2000a; Jarvis & Pavlenko 2010). The current study

will focus on foreign language learners of different learning contexts (immersion and non-immersion) and different proficiencies, and comparing them against monolinguals of the two languages, the Arabic and the English in this case. Comparing the target language use against the monolinguals of the respective languages can offer evidence of CLI should the L2 learners bear similarities or start to resemble the monolinguals of the target language. It is important, however, to understand that L2 learners resembling the target language speakers in their use of the L2 alone should not be taken as evidence of CLI. In fact, there are certain criteria to be met for evidence to be taken as instances of CLI, which will be further discussed later on in this chapter.

One of the main approaches in methodology in this area of research is to use narrative elicitations (Jarvis & Pavlenko 2010). In fact, most of the studies that look into crosslinguistic influence on emotion words and language learning applied the narrative elicitation task as their preferred methodology (Dewaele & Pavlenko 2002; Pavlenko 2002a; 2002b; 2003a; 2003b; 2008d; Pavlenko & Driagina 2007). In addition, there are other studies that investigated emotion words that are not as easily learned and translated into other languages due to being culture and language-specific using different approaches and methodologies namely: interviews, translations, and responses to scenarios (Panayiotou 2004a; 2004b; 2006), categorization, triad sorting, free sorting (Stepanova & Coley 2002; Stepanova Sachs & Coley 2006), questionnaires, story writing (Yee Ho 2009) and triad categorization tasks and similarity judgment tasks (Alvarado & Jameson 2011).

This current research follows the path paved by Pavlenko's research and adopts her approach in using narrative elicitation via the use of short video clips. The reason for such an approach in methodology is that it allows the comparison of the results from this study against Pavlenko's. Not only that but also, narrative elicitation, albeit in third person, offers a more comprehensive and rich set of data when it comes to explaining and

retelling the emotional situation displayed in front of the participants. Nevertheless, this methodological approach needed to be tested in a pilot study to determine whether or not the chosen instruments, i.e., the emotion words and the video clips that will be used to elicit the narratives are adequate for the study. Following is a discussion of the target emotion words *excitement* and *frustration*, which will then be followed by the introduction and discussion of the pilot study.

4.2: Target emotion words - *excitement* and *frustration*

Previous research, see Chapter 2 section (2.2.1), has established the issue of the untranslatability of some emotion words, and this research is an extension of previous research done on the English emotion word *frustration*. This research also examines the English emotion word *excitement*. Even though *excitement* is slightly easier to translate and teach since it is related to one of Ekman's (1980) 'basic' emotions *happiness*, it may be considered only partially equivalent. The reason behind such a statement is because the English language offers distinctions between *happiness* and *excitement*, as does the Kuwaiti Arabic, but due to the low frequency of use of the Kuwaiti counterparts of *excitement*, it can be considered as partially equivalent whereby Kuwaitis seem to merge instances of *excitement* into *happiness*.

To explain the difference between *excitement* and *happiness*, *excitement* is a feeling that indeed does include *happiness* as an ingredient, and also combines the feeling of arousal, enthusiasm, eagerness, and anticipation and is generally more animated. Therefore, it carries a higher emotional weight than *happiness* and is more emotionally charged. From the Oxford English Dictionary, to *excite* (v.) is 'to cause (someone) to feel very enthusiastic and eager' and 'to produce a state of increased energy or activity (in a physical or biological system)', to be *excited* (adj.) is to be 'very enthusiastic and eager' and to be in 'an energy state higher than the normal or ground state', and *excitement* (n.) is 'a feeling of great enthusiasm and eagerness [from]

something that arouses such a feeling' (Stevenson 2010, p.610). *Excitement* also has an element of novelty, and is more likely to be a state that is felt due to current events, most likely to be surprising occurrences, or a future event that one is eager about (Ekman 2004b). *Excitement* is also a short-term feeling that ends with the ending of the trigger (Wierzbicka 1999). Meanwhile, *happy* or *happiness* is more of a feeling of pleasure and contentment, most likely with the achievement of goals or the fulfillment of dreams, and it is more likely to be a long-term state and is a result of good things that have already happened or in some cases may be presently happening, but not of events that are to happen in the future (Ekman 2004b; Sander & Scherer 2009; Stevenson 2010; Wierzbicka 1999). Therefore, from comparing definitions, although *excitement* can be filed under the umbrella of the emotion of *happiness*, it is considered of higher intensity due to its state of physiological and psychological arousal. *Excitement* is also felt for a future or surprising event rather than one that has already happened as with *happiness*. Further to add to the definition of *excitement,* according to Wierzbicka the English emotion word *excitement* is defined as:

> *Excited* (X was excited)
> (a) X felt something because X though something
> (b) sometimes a person thinks:
> (c) "I know now: something very good will happen
> (d) I want it to happen
> (e) I can't think about other things right now"
> (f) when this person thinks this this person feels something good
> (g) X felt something like this
> (h) because X thought something like this (1999, p.59)

As for the emotion word *frustration*, it is defined as the feeling that results from an obstruction or prevention of a goal or achievement either from an external circumstance or personal (dis)ability. It includes the feelings of being *upset*, *distressed*, *annoyed*, and *angered,* and with the prolonged exposure or the increase of the trigger that is causing one's *frustration*, it results in a form of arousal experienced in the feelings of

tension and *restlessness*, and in some cases a display of overt aggression (Ekman 2004b; Sander & Scherer 2009; Stevenson 2010; Wierzbicka 1999).

To further understand the meaning of *frustration*, following is Wierzbicka's definition of the English emotion word *frustration*:

> *Frustration* (X felt frustration)
> (a) X felt something because X thought something
> (b) sometimes a person thinks:
> (c) "I wanted to do something now
> (d) I thought I could do it
> (e) now I 'see' (have to think) that I can't do it"
> (f) when this person thinks this this person feels something bad
> (g) X felt something like this
> (h) because X thought something like this (1999, p.72)

In the case of *frustration*, the closest equivalent is the word *ʾiḥbāṭ,* a word that literally means *disappointment* and *feeling down, sad*, and in *despair*. Even though *ʾiḥbāṭ* carries within its definition the failure to achieve something or an obstruction of a goal, the emotions behind it differ from the emotions linked with *frustration* such as *anger*, *feeling sad* and *upset*, *irritation*, and *agitation*. *Frustration,* therefore, is more emotionally charged than the feeling of *ʾiḥbāṭ.*

In Kuwaiti, there is no word for *frustration* that would equal its meaning and emotional weight, and while *ʾiḥbāṭ* (n.)/*muḥbaṭ* (adj.) is used as an equivalent; it is rarely used as evident from a short survey conducted on the frequency of use of the words *muḥbaṭ* and *mitḥammis* prior to the study. A brief questionnaire was conducted in Kuwait University with 34 participants inquiring about their frequency of use of the emotion words: *muḥbaṭ, mistānis,* and *mitḥammis* on a Likert scale of 1 to 5. Results revealed that the most frequently used word was *mistānis* (average of 4.5), followed by *mitḥammis* (average of 2.5), and *muḥbaṭ* (average of 1.5).

Following the frequency questionnaire, another questionnaire containing the English emotion words *excitement* and *frustration* was distributed during the pilot study to 10 Kuwaiti-English bilinguals (they regarded themselves as balanced bilinguals) and

were asked to translate the words into the closest Kuwaiti equivalent. Additionally, another questionnaire was also distributed to another 10 Kuwaiti-English bilinguals (they regarded themselves as balanced bilinguals) and were asked to translate the Kuwaiti equivalents into English. These questionnaires were to ensure that my own translations were consistent with theirs and that they were indeed the closest possible translation equivalents. These emotion words will be translated twice: once from the English word into the closest Kuwaiti translation, and secondly back-translating the Kuwaiti translations into their English counterparts. This use of such questionnaires was inspired by a task applied by Panayiotou (2004a) in her research on bicultural bilinguals where she presented them with a list of untranslatable emotion words and asked her participants to translate them. The word list presented in Table 4.1 includes the emotion words *frustration* and *excitement,* offering an example of a word that has no equivalent in Arabic, *frustration,* and another that only has a partial equivalent, *excitement*.

Table 4.1: List of proposed English emotion words that are (non)equivalent in Kuwaiti Arabic:

English Emotion Word	Kuwaiti Translation Equivalents	Reason	English Back Translation
Frustrated	*mʿaṣṣib* *mitnarfiz* *minziʿij* *mitḍāyyiq*	The closest translation equivalent found in Modern Standard Arabic is (*muḥbaṭ/ʾiḥbāṭ*). This word is rarely used in the Kuwaiti context. If used, it is a borrowed word from Modern Standard Arabic, as there is no colloquial equivalent in Kuwaiti. *Muḥbaṭ* literally means *disappointed*, and stems from feeling down/low	*angry* *annoyed* *disturbed* *upset*
Excited	*mistānis* *mištaṭ* *mitḥammis* *mitšawwig*	In modern standard Arabic *excited* would be closest in meaning to (*muθār*, *mutaḥammis*). However, *mutaḥammis* in Kuwaiti is modified with vernacular syllable structure and phonological pattern into *mitḥammis*. The most used word to declare one's *excitement* in Kuwait would be (mistānis) which stems from the word (*ʾuns*), which means *to have fun* and feelings of *joy* and *happiness* rather than the *enthusiasm* and *eagerness* which *excitement* carries. Therefore, this word is considered partially equivalent.	*happy* *eager* *excited* *looking forward to…*

4.3: Pilot study

A pilot study aims to test the planned methodology using a small number of participants in order to test the feasibility of the research instruments in terms of the methods and analysis intended for the main study (Dörnyei 2007). As the study requires video clips to elicit the narratives, these clips need to be tested in order to see how well they portray the emotions intended for the study. Furthermore, this pilot study focuses on the lexical and conceptual nonequivalence with focus on emotion vocabulary where the participants are to describe the same emotional scenarios.

4.3.1: Video clips and narrative elicitation

Following Pavlenko's methodology (Pavlenko 2002a; 2002b; 2008d; 2011b; 2014; Pavlenko & Driagina 2007), two short clips were filmed each embodying the emotions in focus for the study, so one for *frustration* and another for *excitement*. These short one to two minute clips are silent so the language used in the film will not affect how the participant perceives the projected emotion. Moreover, care was taken so that these clips are not culture bound or culturally loaded in terms of setting, clothing, and actors. This is to make it equally applicable to test the clips with Arabic speakers as well as with English native speakers without being affected by specific cultural aspects or interpretations.

Participants will be asked to recall the story of the clip they have just viewed to the researcher, and will be filmed via a video recorder during the test as they recalled the narratives. The way the participants describe and retell the story of the video clips in their narratives aids in measuring whether the instruments used, i.e. the video clips, are indeed a prototypical portrayal of the emotions intended for this study. Furthermore, the reason for filming these interviews is to capture spontaneous linguistic intonations and emotional interjections in addition to the vocabulary and structure used in their narratives. This aids the understanding of the lexical choices of the participants as well as

understand any individual or cultural differences that might occur. The filmed interviews will be transcribed and the Arabic data transliterated, and also translated.

4.3.2: Scenarios tested for the pilot study

Clip 1: *Excitement/Excited*

Excitement is defined as a feeling of *joy* and *happiness* of something that is going to happen in the future, and this future something is all that one could ever think of (Wierzbicka 1992b, p.149). Therefore, for the emotion of *excitement*, the clip projects a boy extremely *excited* to travel with his family on vacation during their holiday, running to their car, jumping around, and helping his father put their luggage into the car to head to the airport.

Clip 2: *Frustration/Frustrated*:

Frustration is defined as the feeling a person goes through when attempting to do something, usually a goal that was set, and 'usually through a series of mishaps', this person is unable to fulfill this goal or expectation (Wierzbicka 1999, p.72). It is related to the feeling of *disappointment*, but as Panayiotou explains, *frustration* is neither a feeling of *disappointment* nor a feeling of *hindrance* (2004a, p.8). Therefore, for the emotion word *frustration*, the filmed clip showed a girl working on her end of term assignment and due to procrastination, she only has a few hours to research and write her essay. A little over an hour into the deadline, the computer suddenly crashes. Shocked and panic stricken, she attempts to restart it a number of times. When she finally has the computer working again, she searches, in vain, to find her essay. Frustrated at loosing all her work at the very last minute, she shuts the laptop hard and leaves her desk.

4.3.3: Pilot study - Participants

For this pilot study, participants were recruited from Kuwait University. The study comprises of four groups of participants: immersion learners and FL learners who will be compared with Arabic monolinguals and English native speakers of

approximately the same age. Arabic monolinguals similar in age were quite hard to find as English as a foreign language is taught as a mandatory subject in Kuwait, but those who were not able to complete the English questionnaire given at the beginning of the study without the researcher's aid, and rated their own proficiency as being very low on the questionnaire were labeled as Arabic monolinguals for this pilot study. The immersion classroom participants as well as the FL classroom participants were first year university students of both genders of different majors. The reason for choosing first year university students is that they are just out of high school where classroom observations took part, as well as to ensure 12 years of foreign language learning of English. Moreover, the chance that these participants have come across the emotions words to be tested is higher.

All participants were informed about the study beforehand and informed consent was obtained. A biographical and linguistic background questionnaire was given to learn their age, gender, age of acquisition of their foreign language, the type of their foreign language classroom, whether or not they have had extra curricular classes and language training in their L2 English language, whether or not they have lived abroad or have a foreign parent, frequency of use of their languages, and language dominance, as well as a self rating proficiency question inquiring them to rate their L2 proficiency in reading, listening, speaking, and understanding using a 5 point Likert scale (Dewaele 2010).

A total of 21 students participated in the study, 4 were labeled as Arabic monolinguals due to their very low English proficiency. As for the rest of the participants, 8 were immersion learners of English, and 9 were taught English in FL classrooms. Their age ranged between 18-20.

4.3.4: Pilot study - Procedure

When researching crosslinguistic influence, one has to compare the language learners' knowledge of the target language by comparing the use of their L1 and L2

using comparable tasks in both of these languages (Jarvis & Pavlenko 2010). Therefore, this pilot study tests the participants' use of both their languages. The immersion learners and the non-immersion leaners (hereafter FL learners) of English were split randomly into groups, in which half recalled the story in English first and then in Arabic, and vice versa for the other half. All participants also viewed the clips in a different randomised order. Participants viewed the clips individually and narrated what they saw to the researcher in the languages that were spoken to them when asked to recall what they saw, Arabic when spoken to in Arabic, and English when spoken to in English. They were filmed as they told their narratives.

These two groups were later compared in terms of proficiency using their own proficiency ratings as well as their performance observed in their video data. Those with lower grasp of English grammar and those who made grave errors in grammar and speech were excluded from the pilot study. These comparisons were done to find the closest subgroups in proficiency from the two schooling systems. 4 participants with considerably high English proficiency were found from the FL learners group (M = 4.25), and another 4 were found from the immersion learners of comparable proficiency (M = 4.5), as the remaining 4 immersion learners had lived in an English speaking country for at least 2 years, and those were excluded from of the study. As for the English native speakers, 4 participants volunteered from SOAS and were tested in the same fashion.

4.3.5: Pilot study - Results

The emotion words used in the narratives were counted to compare the types of emotion words as well as the target emotion words used by the tested groups. Tables 4.2 and 4.3 summarize all the emotion words that were used to describe the main characters in both clips for the four groups in both English and Arabic. The tables also list the number of times the word was used by different groups of speakers. There were other

emotion words used to describe the other actors in the clips but they showed no differences among the different groups, and so the focus was solely on the characters' main emotion most likely shown towards the end of the clips.

Table 4.2: The emotion words used to describe the main character's emotion by the four tested groups to describe the *excitement* clip in English and in Arabic:

Group	Emotions in the clip, number of occurrence
English Native Speakers ($N = 4$)	excited, ($n = 4$) happy, ($n = 2$) ecstatic, ($n = 1$)
Immersion Learners of English ($N = 4$)	excited, ($n = 3$) excitement, ($n = 1$) happy, ($n = 2$) ʾilfarḥa (happiness), ($n = 1$) farḥān (happy), ($n = 1$) ʾistānas (became happy), ($n = 1$) mistānis (happy), ($n = 1$) mitḥammis (excited), ($n = 1$)
FL Learners of English ($N = 4$)	happy, ($n = 3$) joy, ($n = 1$) thrilled, ($n = 1$) mistānis (happy), ($n = 4$)
Arabic Monolinguals ($N = 4$)	mistānis (happy), ($n = 3$) mitḥammis (excited), ($n = 1$)

Table 4.3: The emotion words used to describe the main character's emotion by the four tested groups to describe the *frustration* clip in English and in Arabic:

Group	Emotions in the clip, number of occurrence
English Native Speakers (*N* = 4)	frustrated, (*n* = 4) frustrating, (*n* = 1) panicked, (*n* = 1) panics, (*n* = 1) panic, (*n* = 1) disappointed, (*n* = 1) shocked, (*n* = 1) unhappy, (*n* = 1) anxious, (*n* = 1) upset, (*n* = 1) agitated, (*n* = 1) distressed, (*n* = 1) stressed, (*n* = 1)
Immersion Learners of English (*N* = 4)	frustrated, (*n* = 4) frustrating, (*n* = 1) annoyed, (*n* = 1) mad, (*n* = 1) angry, (*n* = 1) inzaʿjat (became irritated), (*n* = 1) mitẓayga (upset), (*n* = 1) ʾiḥbaṭ (frustration), (*n* = 1) ʾixtarʿat (became scared), (*n* = 1) zʿalat (became sad), (*n* = 1) mʿaṣba (angry), (*n* = 1) mitnarfiza (annoyed), (*n* = 1)
FL Learners of English (*N* = 4)	disappointed, (*n* = 3) angry, (*n* = 3) nervous, (*n* = 1) mad, (*n* = 1) down, (*n* = 1) ʿaṣṣibat (became angry), (*n* = 4) taḥabbiṭat (became frustrated),(*n*= 1)
Arabic Monolinguals (*N* = 4)	mitwatra (stressed), (*n* = 2) tiwattirat (became stressed), (*n* = 1) mitẓāyga (upset), (*n* = 1) tiẓayigat (became upset), (*n* = 1) miḍṭarba (anxious), (*n* = 1) mʿaṣba (angry), (*n* = 1) zʿalat (became sad), (*n* = 1)

E*xcited/Excitement*: In the clip that depicted the emotion of *excitement*, as evident in Table 4.2, the emotion word *excited* was used 100% by all the English native speakers. As for the immersion learners, in the English data, *excited* occurred with 3 out of 4 participants, while the word *excitement* was also used along with the word *excited* in 1 of those participants' narratives. This same participant who used both *excited* and *excitement* in their description codeswitched into English when asked to describe the clip in Arabic and used the English word *excited* once again. When asked to use Arabic and not English, she used the word *ʾilfarḥa* (*happiness*). In the Arabic data, the word *mitḥammis*, which is the Kuwaiti translation equivalent of *excited*, was used by only one participant. The Kuwaiti words that were mostly used to describe the emotion of *excitement* were equivalents of the English emotion word *happy*. Furthermore, both in the English and Arabic data from the FL learners showed that the emotion word *excitement* was not used to describe the clip, instead *happy* along with its Kuwaiti equivalents were used in their narratives. Data from the Arabic monolinguals revealed that the dominant word to describe the emotion was *mistānis,* which means *happy* in English occurring in 3 out of the 4 participants' narratives, while the word *mitḥammis* occurred once.

Frustrated/Frustration: the other clip revolved around the emotion word *frustration,* which was summarized in Table 4.3. All the English native speakers identified the emotion of *frustration* using the word *frustrated*. One of the participants also used *frustrating* in his description in addition to using the word *frustrated*. Moreover, all 4 participants from the immersion group also used *frustrated* in their descriptions. As with the example from the native speaker sample, another immersion learner also used *frustrating* in her description of the girl in the clip along with *frustrated*. This same participant used the closest Modern Standard Arabic equivalent,

which is *ʾiḥbāṭ* in addition to *mitzāyga*, which means *upset* in English. When asked what she meant by *ʾiḥbāṭ*, she explained in English that she means *frustrated* and that *ʾiḥbāṭ* was the closest word she could think of. The rest of the participants, however, used the Kuwaiti equivalents of *sad*, *angry*, and *annoyed*. As for the FL learners, *disappointment* and *anger* seem to be the predominant emotion words that were used to describe the girl's emotion in English. In the Kuwaiti narratives, equivalents of *anger* were predominantly used to describe the emotion in the clip. One participant also used *taḥabbiṭat* (*became frustrated,* a derivation of *ʾiḥbāṭ*) in addition to *ʿaṣṣibat* (*became angry*). After the test, this participant was asked what he meant by *taḥabbiṭat* and he explained in English that he meant it as being *disappointed*, which is its actual meaning as opposed to *frustrated*. Moreover, one participant also used the word *down* to describe the girl in the clip, a feeling associated with the feeling of *ʾiḥbāṭ.* Finally, the Arabic monolinguals used Kuwaiti equivalents of *stressed*, *upset*, *angry*, *anxious*, and *sad* in their descriptions with *stressed* and *upset* being the most used words occurring thrice and twice respectively.

To summarize, in terms of the use of the English emotion words in the narratives, the immersion learners seemed to mirror the English native speakers and resembled their choice of emotion words in their data, while the FL learners resembled the Arabic monolinguals for both the *excitement* and *frustration* clips. As for the Arabic emotion words in the narratives, immersion learners seemed to have used a bigger variety of emotion words in their descriptions of both the *excitement* and *frustration* clips. Furthermore, the Kuwaiti equivalents of *happy* were the main emotion words used to describe the narrative in the Arabic data, and equivalents of *excited*/*excitement* were used only twice among all the 12 Kuwaiti participants, one of which was an immersion learner. Immersion learners also displayed the use of both English and Arabic words of *irritation* and *annoyance* in the *frustration* clips which could be regarded as ingredients

of *frustration*, as opposed to words such as *disappointment*, *upset*, and *stress* that were used by the FL learners and the Arabic monolinguals. Although not quite enough evidence of an L2 influence on the L1, there seems to be interesting data to follow up on especially from the immersion learners, and perhaps with a bigger number of participants evidence of crosslinguistic influence may be obtained.

4.3.6: Pilot study - Discussion

The pilot study showed some interesting initial results, suggesting that stimuli and procedures adopted were largely adequate, but may be in need of a number of changes. Firstly, one main issue was the testing of the English language proficiency, although the use of self ratings for foreign learners was proved successful and reliable for previous studies especially ones done by Dewaele (Dewaele 2010; Dewaele & Pavlenko 2001; 2002; 2003), using them as a foundation to compare groups and subgroups may not offer enough reliability or validity for any generalizations to be suggested for the main study, especially when comparing two different schooling contexts, namely immersion and non-immersion. Therefore, a standardized form of English proficiency test should be used for the main study.

Moreover, another issue was the fact that the clips filmed for the pilot study still depicted cultural elements, although extra care was taken not to have the clips become culturally loaded. The native speakers of English noticed cultural elements in their narratives, while Arabic speakers did not, perhaps due to the fact that the clips were filmed in Kuwait and one showed the different styles and size in houses and decor. In her research, Pavlenko had two different films, each culturally loaded in the target language needed to be tested (Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007), and since this study is mainly to test emotions in the English language, the clips to be used for the main study can be chosen from previously filmed English videos. Kuwaiti learners of English are already exposed to the English language and culture via media

including the news, films, books, and magazines, as well as the social media with the exposure to the internet having them exposed to sites and apps such as YouTube, Twitter, Instagram, etc. They are also exposed to the English language and culture by travelling and so having the clips filmed in the target language and culture will not affect the L1 speakers of Arabic as much as it did the L1 speakers of English.

Furthermore, in order to test emotions two elements should be taken into consideration for this study: one being that emotions spontaneously occur and cannot be easily acted, as emotions seemed problematic to detect when forced with acting. Therefore, it is best to use pre-filmed video clips of real people showing real instances of emotion. The second is that the same emotion can occur in more than one scenario or more than one trigger, therefore, more than one clip is needed to depict the same emotion. One last issue was that the filmed clips were my own imposed view on what the emotion is rather than asking native speakers of the target language in question how they define the said emotions and when they might occur, and therefore could have affected the study due to the fact that I am a foreign/second language user myself.

As for the task itself, two different testers are needed to test the different narratives in the two languages, each requesting the narrative in their respective language to avoid having the participants not mention some details when telling the narrative for the second time because they were talking to the same interlocutor as this was an issue that was evident in the pilot study narratives. The language mode (Grosjean 2001; 2004) of the interlocutor is also an important factor to consider for the main methodology, therefore speaking to the respective language speaker will help identify if the experience will change accordingly (Pavlenko 2005).

Furthermore, the importance of triangulation by combining the experimental task with an interview adding in an individual or first person factor to the narrative testing of the groups. This is an important addition to supplement the data to understand

the choice of emotion words used in their descriptions, their meanings, and how they interpret and define the target emotion words psychologically and physiologically.

Moreover, having confined the participants to only first year students at the university proved to be quite hard to gather a substantial number of participants, therefore, for the main study, the range is to be expanded to undergraduate university students, in which they would still have had a minimum of 12 years of foreign language learning.

4.4: Methodology for the present study

This study uses mixed methods, and models the methods used by Pavlenko and Panayiotou in their research on emotions (Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007). The methodology also combines more than one task where it first starts with a standardized English proficiency placement test, followed by a biographical and linguistic background questionnaire, which is then followed by a video recorded narrative elicitation task through film recall, and ending with an interview as a follow-up regarding their narratives and to obtain their definitions of the target emotion words. Adopting these mixed methodologies in this research aids in corroborating the results gathered from each task, as well as aids in gaining a more well rounded understanding of the matter in question (Dörnyei 2007).

The English proficiency test chosen for this study was the Oxford Quick Placement test (OxfordQuickPlacementTest QPT 2001). The test was previously used in studies that looked into language effects and language influence on cognition in colours, grammar, and grammatical numbers, and so therefore, can be extended to be used to research the language of emotions (Athanasopoulos 2006; 2007; Athanasopoulos & Kasai 2008). The test is an online test that offers instant results and is considered reliable in testing participants' performance in vocabulary, grammar, understanding and communication in both British and American English. Results include the Common

European Framework Reference CEFR levels (A1- C2), a score out of 120, the time taken on the test, as well as proficiency descriptors.

The main methodology used is a narrative elicitation task where the participant views a series of short video clips and narrates or retells the story of what they saw in their own words. The reason why the participants are to retell the story of each clip orally is to collect narratives that convey their spontaneous speech (Pavlenko 2008d). Moreover, Epstein explains in his 1915 doctoral dissertation the link between L1 and L2 equivalents, and attributes the ease of access to mental translation to proficiency and mode of expression, he explained that a direct link is more common when speaking (in Pavlenko 2011a).

The narratives will then be compared across the groups in terms of their lexical choices and whether or not there are any preferences amongst certain groups and whether or not groups compare to one another (Pavlenko 2008c; 2014). Perhaps one of the first researchers to devise and use such a task as their methodology was Wallace Chafe (1980) in his *Pear stories*. His team produced the *Pear film* to compare how speakers of different languages verbalize the same event. Others have also used narratives elicited from viewing short films such as viewing Charlie Chaplin's *Modern Times* (Jarvis 2000a; 2002), Mr. Bean's *The Swimming Pool*, and by filming their own short films *The Letter*, *Pis'mo*, *The Ithaca Story*, *The Kiev Story* (Pavlenko 2008d; 2011b). Narrative elicitations were also used in Slobin's (1987; 1996; 2000; 2003; 2005) research but with picture books and stories instead of video clips, which have been greatly inspired by Bamberg's 1987 study using a picture book called *Frog, Where are You?*. However, the reason why films have a slight advantage to picture books is that they seem more realistic and spontaneous (Pavlenko 2011b). Another advantage of narrative elicitation is that it can be seen as an experimental approach as it has a measure of control, whereby all participants would view the same stimuli and describe it afterwards, therefore, their

descriptions can be compared across the groups (Pavlenko 2011b). Moreover, it offers an insight as to how speakers of different languages and with different backgrounds perceive and name the same concept, therefore offering insight on crosslinguistic differences (Pavlenko 2009), as this aids in testing instances of crosslinguistic influence.

Another advantage to such an approach is the information on the types of representations that language learners might have, and whether or not they will mirror the monolingual speakers of the tested language as a result of conceptual transfer or convergence (Pavlenko 2009). Nevertheless, it is not without its weakness, whereby the descriptions of the stimuli are limited to third person narratives, but this issue can be overcome, albeit not entirely, with the addition of the interviews as follow-up questions following the narrative elicitation task. Adding to that perhaps the possibility of not mentioning the target words, which can be overcome, however, by having a big number of participants (Pavlenko 2011b).

This study also adopts *Contrastive Corpus Analysis* where corpora that are comparable in size are elicited using the same stimuli from speakers who are comparable in age, gender, and socio-educational background (Gass & Selinker 1992; Pavlenko 2008d; Pavlenko & Driagina 2007). This aids in examining the similarities and differences in the use of the target emotion words, and identify any instances of crosslinguistic influence (Pavlenko & Driagina 2007). Since a corpus does not exist for Kuwaiti learners of English specifically in their use of emotion words in their L1 and L2, data in spoken form is to be collected from Arabic learners of English, Native speakers of English, and Arabic monolinguals, and is to be transcribed, translated, and transliterated into written form and then labelled and coded creating a corpus to base this study on. Corpus based studies also help establish whether or not a concept exists (Dewaele 2008a), evident from Pavlenko and Driagina's (2007) research for example, rather than the avoidance from the L1 or FL speaker. Whereby if most of the participants do not use

the concept in question then it can be seen as a nonequivalent concept in the tested language(s), but if one or two do not use it, then it can be seen as an avoidance or an individual difference. This research also uses monolinguals as target group or control groups to have a basis to compare performances and instances of language effects, if any (Pavlenko 2000b). Such a design that uses different language groups can also be called a *multi-group design,* whereby data from different L2 or in this case FL learners of different and clearly defined levels of language ability is collected and compared (Jarvis & Pavlenko 2010, p.38).

This study also takes inspiration from a study that Dewaele and Pavlenko devised using an online questionnaire on emotions called The Bilingualism and Emotions Questionnaire BEQ (Dewaele 2010; Dewaele & Pavlenko 2001; Pavlenko 2005). A questionnaire that inquires about the linguistic and biographical background of the participants was devised to create comparable sets and discover the underlying independent variables that might affect the outcome of the study. The questionnaire is the same one used in the pilot study and essentially inquires about the independent variables in the research, namely: their age, gender, schooling context, other contexts where they might have learned their foreign language, for example an English native speaking parent, living abroad in an English speaking country, taking extra language classes as an extra curricular activity, or learning English in a specialized language school after schooling hours. The questionnaire also inquires of their age of foreign language acquisition, their frequency of use of their foreign language and with whom, as well as their language dominance. Moreover, the questionnaire also inquires whether they feel emotions to be stronger in English or in Arabic. They had a Likert rating scale of 1 to 5 in questions, whereby 5 is the highest and 1 is the lowest. As for the English native speakers, their questionnaire inquires about their age, gender, as well as any other languages they speak and having them rate their own linguistic abilities in those other

languages. The same with the Arabic Monolinguals, they had an Arabic questionnaire and filled out their age, gender, and their self rated English language proficiency in which they all have rated themselves between scales 1 and 2. Samples of the questionnaires used for the pilot and the main study can be found in appendices A1, A2, and A3.

Finally, the study ends with an interview inquiring further details on the participants' narratives and on their personal definitions and experiences of the emotions in question. This interview not only serves as a follow up to the narrative elicitations and target emotion word use, but adding a personal first person approach to the participants third person emotion narratives which may not necessarily provide evidence of crosslinguistic influence on its own. The interview also adds the participants' definitions of the psychological and physiological aspects of the target emotion words, which can add clarification to the physiological references used in their narratives. This serves as a triangulation approach whereby quantitative approaches in methodology are combined with qualitative ones to further add support, clarification, and supplementation to the data collected (Dewaele 2005a; Dörnyei 2007; Jarvis & Pavlenko 2010).

4.4.1: Participants

The participants in this study consist of four groups. One is the Kuwaiti or Arabic monolinguals and this is the first control group providing the L1 Kuwaiti Arabic narratives to compare the Arabic narratives from the focus groups to. The other control group is the native speakers of English providing the L2 English narratives to compare the English narratives from the focus groups to. The focus groups of this study are the immersion leaners and the FL learners, and they would be recalling the films in both Kuwaiti Arabic and English. Following, the groups are explained in more detail including number of participants, recruiting method, and QPT scores:

Kuwaiti monolingual speakers of Arabic: Kuwaiti narratives were collected from 17 participants who were students in the Faculty of Arts, Kuwait University from various departments such as History, Arabic, and Geography (ages 19-22, *M* = 20.5, SD = 1.06). They were recruited via the snowballing or chain effect method, i.e. by word of mouth from other students who participated in the study, as well as personally asking students if they were willing to participate around the campus. They scored the lowest on the Oxford Quick Placement test, which they found quite challenging. They have minimal to basic knowledge of the English language and can barely carry out a conversation in English. They were able to maintain a conversation about their age, where they live, and their hobbies, for example with evident difficulty in grammar as well as some difficulty in vocabulary. Additionally, difficulty in both the use of grammar and vocabulary was found when the conversation was complicated by asking about their studies and inquiring more details about their lives in English. These participants were considered to be monolingual speakers, even though in theory monolingual speakers are hard to come across nowadays due to foreign and second language teaching in schools and the exposure to the media. They proved to have extremely low grasp of English as their QPT test results were quite low whereby their scores ranged from 0 to 15 (*M* = 8, SD = 3.82), CEFR score A1.

Immersion Learners and FL Learners of English: Data from the immersion context was collected from 31 participants who were either students in the American University of Kuwait (AUK), or students in the Faculty of Arts, Kuwait University from the English department (ages 19–24, *M* = 21, SD = 1.388). Those participants are labeled as immersion learners as they learned their English language in private English schools from as young as Kindergarten all the way to High school. Their scores on the QPT ranged between CEFR C1 and C2 and scored between 84–106, *M* = 97.4, SD = 6.69.

The second set of data was from 42 FL learners of English who studied their English in Arabic based public schools. Those were later divided into two subgroups: the first group includes 32 participants who obtained comparable proficiency scores with their private school counterparts and scored in the C1 and C2 ranges on their QPT (scores ranged between 85–105, *M* = 97.2, SD = 5.77), hereafter referred to as FL learners CEFR C (ages 19–25, *M* = 21.5, SD = 1.54). The second group includes 10 participants who scored a lower band than their peers having scored in the B1 and B2 ranges on their QPT (scores ranged between 54–76, *M* = 66, SD = 8.34), hereafter referred to as FL learners CEFR B (ages 20–22, *M* = 20.5, SD = 0.70). Those were students in the Faculty of Arts, Kuwait University from the English department as well.

All the students from the English department in the Faculty of Arts, Kuwait University were recruited via email sent from myself to the Head of Department and then forwarded to all the professors and lecturers in the department, which was then passed on to their students. (Samples of the circulated emails can be found in appendices B1 and B2). Furthermore, students also helped in recruiting their friends via the chain effect in sampling. Also, some professors asked me to pay a personal visit to their class to explain the study and answer any questions or concerns the students may have regarding their participation such as maintaining anonymity and being the sole viewer of the video data to be collected and the assurance of the destroying of the recorded videos once the data was transcribed and analysed should a number of the participants, namely veiled females, feel uncomfortable having their video recorded showing their faces uncovered. Some students were given an incentive of a bonus mark should they volunteer to participate. Students from AUK were recruited via word of mouth using relatives who are students in the university.

English Native Speakers: 15 native speakers of English volunteered to participate in the study from either professors who also circulated an email to their students, or via

the university newsletter that was sent via email as well (ages 19–27, *M* = 23.6, SD = 3.35). A £5 incentive was offered to whoever comes forward and volunteered as a participant in the study. Those students were undergraduate and graduate students at SOAS, University of London. Those participants who spoke languages other than English were asked to rate their proficiency in readying, listening, writing, and understanding in their foreign/second language in the questionnaire distributed before commencing the study, and those of Arabic proficiency above *M* = 2 were excluded from the study, as well as those who had a proficiency of above *M* = 3 in other languages.

Others who were excluded from the present study were English learners who lived in an English speaking country or had a foreign or English speaking parent (*N* = 11), students who scored a proficiency score of CEFR A2 or less (20–37 on the QPT) (*N* = 14), students who scored a proficiency score of above 106 on the QPT (108–116) as they could not be compared to the majority who achieved a lower mark on the QPT even though they still maintained a CEFR band C in order to have comparable sets between the immersion and the FL learners (*N* = 8), and students who took English language classes outside of school whether in Kuwait or abroad (*N* = 5). Furthermore, those who did not know the word *frustration* as evident from their interviews (*N* = 6), they were FL learners who had a CEFR B1/B2 bands score on the QPT, were also excluded and the reason for doing so is to exclude those who are not familiar with the emotion word *frustration*, in which the lack of knowledge of the word would increase their guessing, thus increasing individual differences which would affect the group performance, thus maintaining a level of control on individual differences.

The reason why the sample is not balanced is because the data was collected before filtering the QPT scores to create subgroups and that was a limitation in the data collection method. It was first intended to find two groups that are comparable in size between the immersion learners and the FL learners, and therefore expected the data to

be of a sufficient number, but in order to test L2 proficiency as a variable, those with lower proficiency scores than the groups with proficiency band C needed to be compared. After the filtering of the gathered data, the FL learners CEFR B group turned out to be smaller than the rest of the focus groups.

4.4.2: Materials

4.4.2.1: Video clips

In Stepanova's and Coley's studies (2002; 2006), they presented emotional scenarios to a number of participants and asked them to identify what the emotion was. This helped to identify prototypical situations and overcome possible individual differences as well as any impositions on the definition of what the tested emotion is and the emotional situation that is tied to it (Dewaele 2008a). Therefore, and as a measure to rectify the videos used for the pilot study, this present study will be using videos that depict the emotions in question. Based on a short survey done with native speakers of English on defining *frustration* and *excitement* and where and how they might occur, and based on the results, videos were chosen to depict the emotions in their natural and spontaneous conceptual state and in their raw situational context with real people rather than having a forced scripted context using actors.

The survey inquired about the definition of *frustration* and *excitement* on both the psychological and the physiological levels and in which situations they occur. Twenty native speakers of English were asked to participate ranging in ages 15–65 in the short survey. These participants were chosen at random from various places in London such as the university, cafes, shops, and a residential building. For the emotion word *excitement*, participants said that they would feel this emotion when doing positive things for the first time ($N = 2$), seeing an idol or celebrity ($N = 4$), birthday celebrations ($N = 5$), going on holiday or going to a special place ($N = 9$). As for the emotion word *frustration*, participants said they would feel it when their computer lags or causes the loss of their

work due to a technical fault ($N = 7$), not being able to do something ($N = 8$), being late ($N = 3$), and loosing something and not being able to find it ($N = 2$). These scenarios were then taken into consideration when searching on the website Youtube.com for videos that would depict or come close to such situations. Five videos were chosen for each emotion making a total of 10 videos altogether, and were edited using a mac video editing software iMovie to better fit the study in terms of video length (shortened to 1–2 minutes), made silent, additions of explanations, and deletions of translations, texts, or transcriptions of speech. Links to the videos used for this present study can be found in appendix C. The edited selected videos were then piloted to 5 English native speakers from SOAS, University of London who were asked to describe the emotion in the clip using one word, and results revealed that the clips depicting *excitement* and the clips depicting *frustration* were representative of the respective emotions in question.

Excitement **clips:**

Clip 1 (airport scene): This clip shows a little boy jumping around in a display of pure joy and excitement to the fact that he is about to go on a real plane for the first time. It shows him continuously jumping and waving about in excitement at the boarding gate looking out at the plane from the window for the entire duration of the video.

Clip 2 (children fishing): This clip shows a little girl and a boy on a picnic with their parents trying to catch their first fish from the lake with their father. The boy then feels his line tug and with the help of his father, they reel in their catch. The boy displays his excitement at having caught his first fish and is jumping and clapping, the girl joins in on her brother's excitement.

Clip 3 (birthday boy): This clip shows a little boy who is about to turn two sitting in front of his birthday cake with his family around him accessorized in party caps and are seen singing and clapping to the birthday song. The boy is quite overwhelmed with joy and excitement and is barely sitting on his seat wiggling and squirming in excitement,

clapping and shaking about in anticipation to blow out the candles on his cake. He then blows the candles with all his might and starts applauding himself.

Clip 4 (Disney advertisement): This clip is taken from an old Disney advertisement on Disney World/Land and shows a little boy creeping into his sister's room in the middle of the night jumping on her bed and excitedly starts daydreaming and talking about their upcoming trip to Disney World/Land. His sister then signals to him to be quiet for fear that they might wake their parents, and indeed their mother walks in on them and they both fall on the bed laughing.

Clip 5 (Thomas the Train): This clip shows a little boy in a theme park where an actual Thomas the Tank Engine comes into the scene and the boy starts to frantically jump, wave, and dance around in his surprise and excitement to see Thomas. He runs and motions to his parents and points and waves at the train.

***Frustration* clips:**

Clip 1 (lost item): This clips shows the cartoon of a man looking for something he might have lost or misplaced and is seen looking through boxes, drawers, cabinets, etc. The more he looks and does not find whatever it is that he is looking for the more the green lines appear all throughout his body showing his frustration and agitation. In the end, he puts his hands on his head and turns entirely green as the emotion consumes him. (Although this specific clip uses an animation and is not a natural or spontaneous depiction of the emotion of *frustration*, it was chosen nonetheless for the study due to its storyline and inner physiological display of the emotion in question).

Clip 2 (computer man): This clip shows a man in his work cubicle trying to get his computer to work after having spent time working on a project. The technical fault seems to be hard to fix and the man begins to show his frustration by tapping on his keyboard and then on the computer screen, and as it builds up, he begins to show signs of

aggression until he finally explodes and destroys the computer and throws it on the floor and storms out of the office amidst the stares of his colleagues.

Clip 3 (girl with balloon): This clip shows a little girl who is trying to reach the string of a balloon that is suspended from the ceiling and it is just out of her reach. It shows her many unsuccessful attempts at trying to reach it either by jumping, trying to climb onto the sofa, and stretching her arms and fingers as best as she could. She tries to ask for help from her parents, who decline by not offering the help encouraging her to do it on her own, and the girl begins to show her frustration the more she tries to reach for it. She finally gives up and slumps on the sofa.

Clip 4 (boy wearing shirt): This clip shows a little boy trying to dress himself, but his shirt is turned inside out and so he is unable to insert his arm into the armhole. He continues to try but to no avail and shows his frustration and agitation by kicking his toys, hitting at his guitar and bed. Towards the end he eventually gives up and starts crying on the bed.

Clip 5 (shower prank): This clip shows a comedic point of view of a prank on a friend in a school or gym shower room. It shows a boy trying to wash the shampoo out of his hair and so has his eyes closed, as he rinses it off, his friend keeps adding more onto his head, and so the more he attempts to scrub off the suds, the more they appear. He begins to get frantic in his attempts to wash it out and starts to feel frustrated at his failed attempts. He then starts hitting his head and the showerhead in his desperation and frustration at the situation.

4.4.3: Procedure

Participants first had to sit through the Oxford Quick Placement test. They were tested in groups in the University computer lab with strong Internet connection reserved for the study. Each participant had their own computer where they had to sign in and register using a password created specifically for them for this test. They had their own

headphones and were to quietly undergo the test until its end, in which they can sign out and leave afterwards. Upon completing the test, the participants took an appointment that would suit their schedule where they can be individually tested on the second part of the procedure.

Before the onset of the second part of the procedure, namely the narratives, and since the study requires participants to talk about emotions, whether in narratives or when inquiring about their personal experiences, ethical precautions were considered. The study was explained in terms of tasks, and in terms of psychological inquiry. It was explained to all participants that the study investigates the learning of emotion words, and may inquire about personal emotional experiences. Participants were told that even with the incentive offered by the researcher or their teachers, they are not forced to undertake the test, and/or can opt to terminate the test and walk out of it with the promise that any data collected from their session is to be erased and/or destroyed immediately. It was also explained that the test was to be video recorded, and both confidentiality and anonymity were assured to each participant whereby no one but the researcher is to view the taped recordings, under no circumstances are they to be played in front of an audience, and they were to be stored securely until the end of the data collection and analysis stage, in which they would be terminated and destroyed afterwards should the participant request so. They were also promised that the present study, or any study that might follow that may use the data collected from their session, would mention neither their name nor initials. This was explained to them by the researcher and is written on a consent form where the participant was to read it and print their name and sign at the bottom of the form where they were to request whether or not they wish their video recorded data to be destroyed after transcribing the data for this study (those who asked their video data to be destroyed afterwards were: N = 8 females, 2 males). This step was then followed by answering the biographical and linguistic background questionnaire.

For the narrative elicitation test, each participant was tested individually in a quiet room reserved for this study. Each participant was told that they would view clips that were entirely different than what the other participants would view in order to minimize the spreading of what answers they are expected to give the researcher. Participants were to narrate each video twice, once in English, and once in Arabic, and were counterbalanced in order which was randomly assigned to each participant in order to avoid ending up with self-translations of their narratives. To elaborate, in order to minimize carry-over effects or order effects, participants were split into three groups randomly, where the order of both the video clips and the language of the narratives was systematically varied. For example, in one condition, they would retell the narratives of *excitement* clip 2 in English first then in Arabic, then the narratives of *frustration* clip 4 in Arabic first then in English, and so on. So the clips and the languages were counterbalanced as best as possible to avoid the effect of speaking in one language affecting the narrative of their second. Furthermore, the *frustration* and *excitement* clips were randomly blended, rather than testing clips for *frustration* first followed by *excitement* or vice versa, so as not to give participants an idea of what word or emotion that I am investigating, also so they do not feel redundant and that they are using the same word for the all the clips and feel the need to change their choice of vocabulary.

Additionally, the participants were to retell their narratives to respective speakers of the language in question sitting in the testing room. One native speaker of English associate, and another Kuwaiti associate were recruited to aid in the study. The English native speaker was to ask: 'Can you please tell me what you just saw in the film, and describe the emotion of the person in the clip' in English, while the same question was asked in Kuwaiti Arabic with the Arabic speaker. Further measures to control carry-over effects included having one of the associates step out of the testing room when speaking in the language of the other associate, for example, when speaking in Arabic, the English

associate would step out of the room, when finished with the Arabic narrative, the Arabic associate would step out and the English associate would step in and the participant would be asked to narrate the clip in English. This aids in minimizing the order effects in two ways, having to retell the narrative to a different person who was not in the room when retelling the narrative in the other language, and allowing time to pass between retelling the narratives. While speaking to the respective associate, the entire task was video recorded, and the researcher would be sitting in the back of the room regulating the order of the videos, languages, asking the associates to step out, and taking notes for the third part of the procedure.

For the third and final part of the study, the researcher then sits with the participant on a semi-structured interview regarding the emotion words used in the narratives and their own personal experiences. The use of in-depth interviews after the BEQ was also used by Dewaele (2010) as a supplement to his research. It was also advised that when testing large well defined groups of language users to direct attention to the individuals as well, thus combining an intersubjective and intrasubjective approach to investigating crosslinguistic transfer and influence (Jarvis & Pavlenko 2010, p.31). This interview was mainly inspired by Panayiotou's (2001; 2004a; 2004b; 2006) case study approach on *frustration* and *stenahoria* using semi-structured interviews inquiring about these emotions and where and how and why they were felt in each language.

The interview questions revolved around defining the emotions in question, how they can be felt mentally and emotionally (in the mind), how they can be felt physically/physiologically (in the body), the closest translation equivalents in Kuwaiti Arabic, comparing between the English emotion words and their translation equivalents in emotional force and valence, whether or not they see a difference between them and their synonyms, for example *frustration* and *anger*, and *excitement* and *happiness*, whether or not they saw the person in said clip as *frustrated/excited*, why they said they

were *frustrated/excited*, where they might have learned it, at approximately what age, frequency of their use, preferred language of expression, and situations in which they might occur. A sample of the interview questions can be found in appendix D.

4.5: Data processing and analyses

4.5.1: Handling the data

The data was transcribed from the video recordings using transcription conventions and narrative analysis procedures in the language that they were spoken in (Chafe 1980; Labov & Waletzky 1967). Recordings were listened to multiple times to transcribe the narratives and interviews, and then reviewed again after transcriptions were written to go over any discrepancies. Hesitations, false starts, and pauses were all included in the transcriptions. The Arabic data was transliterated using Arabic conventions as well as being translated from Arabic to English. Translations were done by myself at first, and afterwards help was recruited from professional translators to ensure the same translation was achieved and were not faltered by my own assumptions of translation equivalents.

All interviews and narratives in the Kuwaiti dialect were kept in the transcriptions to maintain authenticity even though the dialect is not usually written in form. Furthermore, all instances of use of emotion words as well as any accompanying talk of emotions such as instances of emotional states and internal states and behaviours were highlighted and underlined in order to be analysed quantitatively and qualitatively. Data was coded for the analyses according to their use in either SPSS, for the quantitative analyses of the statistical data, or in NVivo, for the analyses of the qualitative data (Baralt 2012; Larson-Hall 2012).

4.5.2: Data analysis

This research examines how different foreign language learners from different L2 English learning contexts in Kuwait identify and express the same emotional situation in

the L1 and the L2. Evidence of a conceptual shift when examining foreign language learners and speakers in their two languages, the L1 and the L2, suggests the possibility of a crosslinguistic influence. Jarvis and Pavlenko (2010) discussed the importance of methodological rigor when applying CLI as an approach to language influence research. Evidence from CLI includes the following:

1. Intragroup homogeneity: Evidence that the behaviour in question is not an isolated incident, but is instead a common tendency of individuals who know the same combination of languages – similarities within the group.
2. Intergroup heterogeneity: Evidence that the behaviour in question is not something that all language users do regardless of the combinations of L1s and L2s that they know – differences between the groups.
3. Crosslinguistic performance congruity: Evidence that a language user's behaviour in one language really is motivated by her use (i.e., the way she demonstrates her knowledge) of another language.

(Jarvis & Pavlenko 2010, p.35).

The performance of the English language learners in Kuwait, immersion and non-immersion, in their English and Arabic is compared against the monolinguals of these two languages and any similarities and/or differences in their performance will be linked or traced back to a possible influence from the target language, or vice versa. Through the use of multiple types of data such as narrative elicitation via film recall and supplementing the narratives with one-on-one interviews, several findings can be studied against one another and evidence can either be corroborated, explained, or surface through other forms of data (Jarvis & Pavlenko 2010). The analytical framework sets out to answer the research questions posed in Chapter 3 through the use of planned comparisons using both SPSS and NVIvo. Data analyses will first apply statistical tests using the software SPSS version 23 to analyse the quantitative data, and then use the

software NVivo version 10 to analyse the qualitative data. The data report chapter of this thesis will be divided into two chapters: the first analysing the data from the tests using the emotion word *excitement*, and the chapter that follows will analyse the data from the tests focusing on the emotion word *frustration*.

Chapters 5 and 6 will report the results and each will compare the different tested groups (focus groups) by comparing their L2 English and L1 Arabic narratives with one another, as well as comparing their narratives with those collected from native speakers and monolinguals of the respective languages (control groups). The analyses will include the following: the lexical productivity of the narratives as a whole (Dewaele & Pavlenko 2003) with focus on the emotion vocabulary in terms of size and richness, which will be further discussed in the following section discussing lexical productivity and lexical diversity (Pavlenko 2008d; Pavlenko & Driagina 2007), and this is then followed by looking at the target emotion word use. By comparing the focus groups against one another and against the control groups the analysis thusly examines whether differences exist between the groups in focus, as well as the languages in question thus attempting to answer Research Question 1, which revolves around examining the differences in the use of the L1 and the L2 between the groups. Differences, if any, might be attributed to crosslinguistic influence should the participants' L2 narratives resemble those collected from the English native speakers, and affected their L1 narratives where they show clear differences from the Arabic monolinguals' narratives. Similarly, the same applies should the L1 narratives resemble those collected from the Arabic monolinguals and are reflected in their L2 narratives, which also differ from those collected from the native English speakers. In other words, should their performance in their L1 differ from the monolinguals of their L1, while resembling the performance of the monolinguals of their L2, and this is also reflected in their performance in their L2, this can be seen as a result of an influence of this learned language. Thusly providing answers to Research Question

2, which focuses on examining effects of CLI. Moreover, in addition to examining the differences and changes in the use of emotion words with the use of a different language SPSS comparisons also aim to discover the variables that might have affected the target emotion word use between the tested groups (Dewaele & Pavlenko 2002). This provides answers for Research Question 3, which inquires about the variables that facilitate the identification and use of partially equivalent and nonequivalent L2 emotion words in foreign language classrooms in Kuwait.

4.5.2.1: Quantitative analysis using SPSS

The first part of the analysis examines the effect of the independent variable, namely the groups: the monolingual speakers of the languages in focus, the immersion learners – proficiency CEFR C, the FL learners – proficiency CEFR C, and the FL learners – proficiency CEFR B on 3 dependent variables: the proportion of narrative word tokens to the overall number of words in the narratives, the proportion of emotion word lemmas to the overall number of emotion word lemmas, and the proportion of emotion word tokens to the overall number of emotion word tokens. This will be conducted for both the L1 and the L2 data. These planned comparisons are to examine possible effects of CLI, and trace them back to the possibility of the effects of the context of L2 learning and/or L2 proficiency. The data was first tested for normalcy of distribution with a Shapiro-Wilk test and by use of a histogram (Dörnyei 2007; Larson-Hall 2010) to determine which statistical test to use. It revealed that for the most part, the data was normally distributed, however, there were some parts of the data that were not normally distributed.

Therefore, for this study, it was opted to use a parametric test that would compare the means. Previous literature on statistics claim that a parametric test, such as the one-way analysis of variance (ANOVA) test can be used in such cases even though it violates the norm. The reason for so is that the ANOVA is a powerful test that will not be easily

affected should the data be slightly skewed since its robustness tolerates the normalcy assumption. In fact, the ANOVA is considered to be the most powerful statistics test at detecting differences in the means of the tested groups (Glass et al. 1972; Harwell et al. 1992; Lix et al. 1996; Mcdonald 2014). Therefore, this study compares groups using a series of one-way ANOVAs, further details on the independent and dependent variables of each test will be discussed in the following results chapters. The study also uses Pearson correlation tests as well as independent sample t-tests when comparisons are needed between two groups (Dörnyei 2007; Larson-Hall 2010; 2012). Furthermore, two-way ANOVA (general linear model) was also applied when comparing the groups' narratives between the L1 Arabic and the L2 English.

As there are five different clips depicting the same emotion of *excitement* and another five depicting the emotion of *frustration*, a Cronbach's alpha was run to check for internal consistency amongst the five clips across all five groups in the two narrated languages for the emotion word lemmas, emotion word tokens, and total word tokens in order to group the five clips together as one for *excitement*, and another for *frustration*. However, because of the small number of occurrences in the emotion word lemmas and emotion word tokens (ranged from 1 to 4), the tests did not show consistency in these domains, but did show consistency in the use of the number of total word tokens in the narratives. Nevertheless, the five clips were combined together into one for *excitement* and another for *frustration* due to the small number of participants, as it would be better to group all five clips for each emotion word into one rather than test each clip on its own.

Lexical productivity and lexical diversity:

This study looks at language effects on the lexical productivity and diversity by looking at the narratives as a whole, and focusing on the use of emotion words both in English and in Arabic. Lexical productivity of the emotion words looks at three aspects:

the proportion of the total number of words or the length of the narrative as a whole (word tokens) to the overall number of words in all the narratives, the proportion of the number of different emotion words used (emotion word lemmas) to the overall number of emotion word lemmas, the proportion of the number of emotion words used in the narrative (emotion word tokens) to the overall number of emotion word tokens, and the type-token ratio which is a measure of the richness of the emotion vocabulary in the narratives (TTR). Meanwhile, lexical diversity, which is also linked to lexical productivity, is also measured by calculating the type-token ratio (TTR) (Dewaele & Pavlenko 2003). The type-token ratio (TTR) is commonly calculated by dividing the total number of types over the total number of tokens; however, new measures have been suggested to ensure more valid results in cases where the narratives are not of equal length, and instead of dividing the types/tokens it was suggested to best use the Dugast's Uber formula which was formulated in 1980 (Jarvis 2002; Dewaele & Pavlenko 2003).

$$\text{Uber index} = \mathcal{U} = \frac{(\log tokens)^2}{\log tokens - \log types\ (tokens)}$$

Nonetheless, calculating the TTR will only look at the emotion words as this study focuses on the richness of the emotion vocabulary rather than the lexical richness of the entire narratives. Such measures will test the number of words used and the variety of emotion words to aid group comparisons in order to see whether group differences occur and which variables may have affected the productivity in the participants' descriptions of the presented emotion scenarios. And most importantly, attempt to detect whether differences between groups and languages might be attributed to CLI, answering in this case Research Questions 1 and 2.

Because Research Question 3 revolves around the factors that might have affected the use of emotion words in the narratives, the analysis then focuses on relating the use of emotion lemmas, emotion word tokens, and narrative length to the foreign language learning contexts, foreign language proficiency, age of acquisition of English,

frequency of use of English, gender, and language dominance. Multiple series of ANOVAs and independent sample t-tests, for cases when there are less than 3 groups to compare, will be used to investigate these factors or independent variables.

After that, the analysis will focus on the target emotion word use in the narratives, and once again compare the use of *excitement* and *frustration* across the groups. All instances of *excitement* and *frustration* along with their derivatives were counted and compared via one-way analysis of variance ANOVA. ANOVA and independent sample t-tests were also used to investigate the factor or variables that might have affected the use, or lack of, of the target emotion words in question. These factors include: foreign language learning contexts, foreign language proficiency, age of acquisition of English, age of acquisition of the emotion word, frequency of use of English, frequency of use of the emotion word, gender, and language dominance. This analysis of target emotion words also attempts to provide possible answers to Research Questions 1, 2, and 3 answering whether or not differences exist between the tested groups, whether CLI effects exist in foreign language classrooms, and what variables can be attributed so such effects.

4.5.2.2: Analysis using NVivo

The qualitative data from the narratives as well as the interview are analysed using a computer-assisted qualitative data analysis software (CAQDAS). This study will be using a software called NVivo version 10 for the analysis, as NVivo is the most chosen software to be used in SLA research for the analysis of qualitative data (Baralt 2012). Data was first organized into a data sheet combining the important details needed for the analysis such as the context of learning, details from the narrative data, as well as the interview data all organized into columns. NVivo auto-coded the header of each column into a node, which served as an identification of the broad themes and interview questions. The groups were classified according to their context of learning and the

classification was then applied to the nodes. Data was then coded under these nodes into tree nodes after multiple cycles of reading and rereading the data as patterns start to emerge. Patterns and themes were coded as nodes from the literature review and research questions, as well as the ones that emerged from the data itself. Matrix coding queries as well as word frequencies were the most run tests to establish whether or not differences, if any, exist between the different groups. The analysis first looks at emotion lexical choices used to describe the emotions of the characters in the clips. All instances of emotion words were counted, in which derivations of the same emotion word were all counted and grouped under the adjectival form. The analysis will focus once again on group comparisons as well as language comparisons whereby differences that may be found in one language and can be traced back to the other language can be taken as possible evidence of crosslinguistic influence, thusly providing possible answers to Research Questions 1 and 2.

Moreover, since this research also aims to answer Research Question 4, which revolves around investigating the differences in the emotional display as interpreted by different language speakers and FL learners from different L2 learning contexts. The analysis focuses on the participants' attention and observations of the physiological reactions of the characters in the video clips and comparing them with one another. These observations will also be compared against the participants' lexical choices to explain their use of the target emotion words. All instances or references to a physiological reaction to the emotion in question will be compared. Such references include physical states, gestures, facial expressions, etc. Since emotions are projected in the face and body, higher or lower attention to the facial and physical reactions will be compared to how the participants from the control groups pay attention to the emotional physiological reactions associated with the target emotion words.

The same analysis will be applied to the interview questions, where the interview questions focused on how each participant defines the emotion words in focus, how he/she describes the emotional experience of the target emotion word, as well as how he/she describes the physical and bodily experience. Additionally, the interview also inquires how they translate the target emotion words into Kuwaiti Arabic, whether or not they think their translation(s) carrie(s) the same emotional weight as the target word, and whether or not they think differences exist between the closest English equivalent to their Arabic translations. The analysis will look into whether or not there would be a high or low agreement between the participants within the group, and between the groups themselves. The answers from the interview will be corroborated and compared with the emotion words used in the narratives to find further evidence of crosslinguistic influence; thusly providing further answers for Research Questions 1, 2, and 4.

4.5.2.3: Further qualitative analysis

The analyses are further supplemented with a qualitative analysis of a few examples from the narratives. The qualitative analysis focuses on finding possible evidence of semantic extension, conceptual transfer, lexical borrowing, loan translation, and avoidance in the narratives, and trace this evidence back to the possibility of crosslinguistic influence (Jarvis & Pavlenko 2010; Pavlenko 2008d; 2014) answering Research Question 2. There was evidence of lexical borrowing found in the data, as well as a possible evidence of conceptual transfer due to the participants having trouble finding the L1 word to describe the situation in their Arabic narratives, further details and examples are found in the following results chapters.

4.6: Summary

This chapter first introduced the English emotion words intended for this study, namely the partially equivalent *excitement* and the nonequivalent *frustration.* The chapter then discussed the pilot study from the participants to the procedure ending with the

discussion of the pilot study results. After that, the chapter then introduced the methodology used in the present study discussing methods of data collection, materials, participants, procedure, and data analyses. The following chapters will report the results, Chapter 5 on *excitement*, and Chapter 6 on *frustration*.

Chapter 5: RESULTS on *Excitement*

5.1: Introduction

This chapter reports results on the partially equivalent emotion word *excitement* gathered from the questionnaires, narrative elicitations, and interviews. Chapter 6 reports results on the nonequivalent emotion word *frustration*. As previously mentioned, the analyses attempt to answer the research questions which mainly revolve around whether there exists an influence of language, either the L1 on the L2 or vice versa, when Kuwaiti foreign language learners of English from different L2 learning contexts are presented with the same emotional scenarios in how similarly or differently they might perceive and express emotions between their native and learned languages. These foreign language learners from different foreign learning contexts and different L2 language proficiencies might differ in how they view and express emotion words that are specific to the L2 they are learning in which differences can provide initial input on the effect of language learning on emotional expression in the first language and vice versa. Moreover, differences that may be found in one language as an influence of the other language can provide a form of evidence towards crosslinguistic influence in the language learner's lexicon.

This chapter first reports the results of the quantitative analyses using SPSS and then reports the analyses using NVivo, followed by further analysis of the qualitative data. The quantitative analysis first applies SPSS to examine the lexical productivity of the English and Arabic narratives and the productivity and diversity of the emotion vocabulary used in those narratives. It compares the use of emotion lemmas, emotion word tokens, and the total word tokens between the control and focus groups as well as compares the use of emotion lemmas, emotion word tokens, and total word tokens between the two tested languages.

Finding group differences in the English data and finding the same in the Arabic data can be taken as a form of evidence of L2 influence on the L1. Meanwhile, finding group differences in the Arabic data that are also reflected in the English data can be taken as evidence of L1 influence on the L2. In other words, the participants' performance in one language can be seen as a reflection of their knowledge and performance in the other language, whether the L1 on the L2 or vice versa (Jarvis & Pavlenko 2010), in which different groups of language learners, i.e. from different learning contexts and different proficiencies, might perform differently due to their differences in their knowledge of not only the target language, but their native tongue as well.

The analysis then focuses on linking any differences between the control and focus groups to possible factors such as foreign language learning context, English language proficiency, age of acquisition of English, frequency of use of English, gender, and language dominance. Furthermore, the quantitative analysis examines the differences in use of the target emotion word, and also identifies the possible factors that may have mediated the learning, understanding, and use of the target emotion word *excitement*.

The analysis of the qualitative data, i.e. narrative data, then compares the use of emotion words in the narratives between the groups and languages using NVivo. It examines the emotion lexical choices used to describe the clips comparing the use of emotion words between English and Arabic from both focus and control groups. The analysis also examines the use of words related to the physiological reactions associated with the participants' use (or lack of) of *excitement*. Following the analyses of the narratives, NVivo is used to examine the interview answers comparing the participants' definitions of *excitement*, how the emotion is defined between the mind and the body, and their Arabic translations of *excitement* to support the findings from the narratives.

Further qualitative analysis takes a closer look at the narratives to find evidence of semantic extension, conceptual transfer, lexical borrowing, loan translation, and avoidance in the narratives. Examples in the form of excerpts are illustrated in this chapter, and examples of entire narratives from the *excitement* data can be found in appendix E1.

5.2: Quantitative analysis

5.2.1: Lexical productivity and diversity of the narratives and use of emotion vocabulary

This part of the analysis looks at the productivity and diversity of emotion word use in the narratives. Previous studies found evidence of crosslinguistic influence on the proportion of emotion lemmas in the narratives between the language learners and the L1 speakers of the respective languages in focus (Pavlenko & Driagina 2007). The possibility of finding differences in emotion word use not only between the tested groups, but also between the tested languages can be taken as a possibility of crosslinguistic influence, either the L1 Arabic on the L2 English, or the L2 English on the L1 Arabic, where the knowledge of one language affects the use of the other. The following analysis looks at the differences in the use of emotion lemmas, emotion word tokens, the richness of the emotion vocabulary (TTR), and the length of the narratives by comparing the total word tokens. This will provide answers for Research Questions 1 and 2 which inquire about the differences between the tested groups, mainly the immersion and non-immersion learners, as well as inquiring whether CLI effects exist in their narratives and richness of their emotion vocabulary.

Table 5.1 summarizes the lexical productivity of the narratives along with the productivity and richness of emotion word use in the English *excitement* clips. The results from the five clips did not show any noticeable major differences; hence data from the five clips were combined to allow a more robust statistical testing. The descriptive summaries of the narratives of each individual clip in terms of length of the

narratives and variety of emotion words used in the English *excitement* clips can be found in appendix F1.

Table 5.1: The lexical productivity of the English *excitement* narratives and productivity and richness of emotion words used in the narratives including: number of emotion lemmas, number of emotion word tokens, richness of emotion vocabulary – Uber type/token ratio (TTR), and number of word tokens:

Context of Learning /Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English Native Speakers *N* = 15	Sum	103	127*	0.38	3133*
	Mean	6.86	8.46*		208.86*
	SD	1.45	1.45*		45.27*
Immersion Learners *N* = 31	Sum	222	259	0.32	5480*
	Mean	7.16	8.35		192.80*
	SD	1.29	1.58		43.41*
FL CEFR C *N* = 32	Sum	223	242	0.58	5211*
	Mean	6.96	7.56		162.84*
	SD	1.20	1.45		36.69*
FL CEFR B *N* = 10	Sum	63	73*	0.67	1412*
	Mean	6.3	7.3*		141.2*
	SD	1.15	1.05*		35.89*

* Significant differences between the groups

To reiterate Hypothesis 1, it states that no differences will be found between the immersion learners' use of L2 English emotion words and the emotion words used by the English native speakers. Meanwhile, the non-immersion learners' English answers will differ slightly from the English native speakers. No differences will be found in the L2 learners' use of Arabic emotion words when compared with the Arabic monolinguals.

In order to test the hypothesis, at a significance level of 0.05, several series of one-way analysis of variance (ANOVA) were run to examine whether differences exist between the participants from different foreign language learning contexts and English language proficiencies since ANOVA allows the comparison of means of four different samples. In this case, ANOVA compared one independent variable (groups) that has four levels: English native speakers, the immersion learners – proficiency CEFR C, the FL learners – proficiency CEFR C, and the FL learners – proficiency CEFR B. Each of these

ANOVA tests examined the independent variable against a different dependent variable namely: the proportion of narrative word tokens, the proportion of emotion word lemmas, and the proportion of emotion word tokens.

One-way ANOVA conducted on the proportion of the number of total word tokens (i.e. the length of the English narratives) revealed significant differences $F(3, 84) = 8.472$, $p < 0.001$ between the tested groups. Bonferroni post hoc analyses were run as the mean sizes are considered small so the Bonferroni test has more power in this case and revealed significant differences between the native speakers of English ($M = 208.86$) and the FL learners CEFR C ($M = 162.84$) as well as between the native speakers of English and the FL learners CEFR B ($M = 141.2$) $p = 0.001$ and $p = 0.003$ respectively. There were also differences between the immersion learners ($M = 192.80$) and the FL learners CEFR C as well as between the immersion learners and the FL learners CEFR B $p = 0.005$ and $p = 0.026$ respectively. Meanwhile, no differences were found between the English native speakers and the immersion learners. In terms of narrative length in the L2 narratives, results revealed that the immersion learners seemed to approximate the English native speakers.

As for the richness of emotion words, two separate one-way ANOVAs were run to compare the proportion of emotion lemmas and the proportion of emotion word tokens. ANOVA revealed no differences between the groups of participants in the proportion of emotion lemmas $F(3, 84) = 1.169$, $p = 0.326$, but revealed differences in the proportion of emotion word tokens $F(3, 84) = 2.082$, $p = 0.045$. Bonferroni post hoc tests revealed differences between the English native speakers ($M = 8.46$) and the FL learners CEFR B ($M = 7.3$) $p < 0.05$ in the use of English emotion word tokens.

Although differences were found in the length of the narratives, no differences were found in the use of the English emotion words, namely emotion lemmas and emotion word tokens, between the native speakers of English and the immersion

learners, thus accepting part of Hypothesis 1, which states that no differences will be found in the use of English emotion words between these two respective groups. The other part of the hypothesis states that slight differences will be found between the non-immersion learners and the English native speakers in the use of emotion words, and while no differences were found in the use of English emotion lemmas, differences were found between the native speakers of English and the FL learners CEFR B, therefore accepting the hypothesis.

As for the Arabic data, Table 5.2 displays the combined sum of word tokens used in the narratives along with the combined sum of the emotion lemmas and the combined sum of the emotion word tokens from clips 1 to 5 in the Arabic *excitement* clips. The descriptive case summaries of the five individual *excitement* clips can be found in appendix F2.

Table 5.2: The lexical productivity of the Arabic *excitement* narratives and productivity and richness of emotion words used in the narratives including: number of emotion lemmas, number of emotion word tokens, richness of emotion vocabulary – Uber type/token ratio (TTR), and number of word tokens:

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	108	126	0.50	1944
	Mean	6.35	7.41		114.35
	SD	1.11	1.54		41.72
Immersion Learners *N* = 31	Sum	198*	247	0.23	3898
	Mean	6.38*	7.96		125.74
	SD	1.11*	1.76		34.73
FL CEFR C *N* = 32	Sum	182	235	0.22	3551
	Mean	5.68	7.34		110.96
	SD	0.89	1.15		29.13
FL CEFR B *N* = 10	Sum	55*	68	0.54	941
	Mean	5.5*	6.80		94.10
	SD	0.70*	1.61		27.51

* Significant differences between the groups

A series of one-way ANOVAs were run to investigate whether there were any differences between the means of the Arabic speaking groups in terms of length and

richness of their Arabic narratives and emotion words use. No significant differences were found between the Arabic monolinguals, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B in terms of the proportion of total word tokens used in their narratives F (3, 86) = 2.498, p = 0.065. No differences were found in the proportion of emotion word tokens either F (3, 86) = 1.842, p = 0.146. Meanwhile, significant differences were found in the proportion of emotion lemmas between the groups F (3, 86) = 4.067, p = 0.009. Bonferroni post hoc analyses revealed differences in the use of emotion lemmas in the Arabic *excitement* clips between the immersion learners and the FL learners CEFR B, p = 0.042 in which the immersion learners had the highest number of emotion lemmas (M = 6.38), while the FL learners CEFR learners B had the lowest (M = 5.5).

The latter part of Hypothesis 1 states that no differences will be found in the L2 learners', i.e. immersion and non-immersion, use of Arabic emotion words when compared with the Arabic monolinguals. Indeed, no differences were found in the use of Arabic emotion word tokens, however, slight differences were found in the use of emotion lemmas between the immersion learners and the FL learners CEFR B, thus partly rejecting the hypothesis.

In order to test whether such differences or lack of are due to a crosslinguistic influence, the following analyses partly tests Hypothesis 2 focusing on the proportion of emotion words used, which states that there will be an L1 Arabic influence on the L2 English descriptions of emotions in the non-immersion learners' data but not among the immersion learners where there will be an influence of their L2 English on their L1 Arabic descriptions of emotions.

To compare the differences between the control and focus groups in the proportion of emotion words use between the two languages, narratives must be compared in terms of length to determine that the increased use of emotion words is not

due to the increase in narrative length. For even though languages cannot be compared in terms of length since different languages require a smaller or larger number of words, this analyses is mainly to compare the use of emotion vocabulary. Firstly, the proportion of word tokens and the proportion of emotion words used by the English native speakers and those by the Arabic monolinguals were compared using independent sample t-tests to identify whether differences exist between the control groups. For the proportion of word tokens used in the narratives, significant differences were found between the English and the Arabic control groups whereby the English native speakers produced considerably longer narratives in the *excitement* clips than the Arabic monolinguals t (30) = -6.145, $p < 0.001$ (equal variances assumed) ($M = 208.86$ vs. $M = 114.35$). However, independent sample t-tests revealed that there were no differences between the proportion of emotion lemmas and the proportion of emotion word tokens that were used between the Arabic and the English control samples t (30) = -1.128, $p = 0.268$ (equal variances assumed), and t (30) = -1.980, $p = 0.057$ (equal variances assumed) respectively.

In addition, to calculate whether the focus groups (immersion learners, FL learners CEFR C, FL learners CEFR B) differed in their emotion word use between their English and Arabic data, a series of two-way ANOVAs (General Linear Model) were run to test differences and possible interactions with the groups. The between group variable in the two-way ANOVA was the context of learning/proficiency, in other words the three focus groups, while the language was the within group variable comparing English and Arabic. The series of two-way ANOVAs tested the proportion of narrative word tokens, the proportion of emotion lemmas, and the proportion of emotion word tokens as dependent variables.

For the length of the narratives, the main effect for context of learning/proficiency was significant F (2, 70) = 6.80, $p = 0.002$, indicating there were

significant differences among the focus groups from different learning contexts and L2 proficiencies. The immersion learners' narratives (M = 159.27, SD = 51.60) were significantly longer than the FL learners' CEFR B narratives (M = 117.65, SD = 39.41), p = 0.004. The immersion learners' narratives (M = 159.27, SD = 51.60) were also significantly longer than the narratives obtained from the FL learners CEFR C (M = 136.91, SD = 42.00), p = 0.034. No differences were found between the FL learners CEFR C and the FL learners CEFR B. Furthermore, the main effect for language was significant F (1, 70) = 351.62, $p < 0.001$, indicating there were significant differences in the length of the narratives between English and Arabic, whereby the English narratives (M = 114.93, SD = 32.87) were significantly longer than the Arabic narratives (M = 172.60, SD = 43.37). Additionally, the interaction effect between the language of the narratives and the context of learning/proficiency was significant F (2, 70) = 5.14, p = 0.008, indicating differences among the focus groups in the length of the narratives between their English and Arabic narratives. To explain these differences, in the immersion learners' data, the English narratives (M = 192.81, SD = 43.41) were significantly longer than the Arabic narratives (M = 125.74, SD = 34.73), $p < 0.001$. In the FL learners' CEFR C data, the English narratives (M = 162.84, SD = 36.70) were significantly longer than the Arabic narratives (M = 110.97, SD = 29.14), $p < 0.001$. In the FL learners' CEFR B data, the English narratives (M = 141.20, SD = 35.90) were significantly longer than the Arabic narratives (M = 94.10, SD = 27.52), $p < 0.001$. Further differences were found across the groups, in the Arabic narratives, the immersion learners (M = 125.74, SD = 34.73) used a significantly higher number of Arabic word tokens than the FL learners CEFR B (M = 94.10, SD = 27.52), p = 0.020. No significant differences were found between the immersion learners and the FL learners CEFR C, or between the FL learners CEFR C and the FL learners CEFR B. As for the English narratives, the immersion learners (M = 192.81, SD = 43.41) have also used a

significantly higher number of English word tokens than the FL learners CEFR B (M = 141.20, SD = 35.90), $p < 0.001$. Furthermore, the immersion learners (M = 192.81, SD = 43.41) have also used a significantly higher number of English word tokens than the FL learners CEFR C (M = 162.84, SD = 36.70), $p = 0.010$. No differences were found between the FL learners CEFR C and the FL learners CEFR B.

As for the proportion of emotion lemmas, the main effect for context of learning/proficiency was significant F (2, 70) = 5.68, $p = 0.005$, indicating significant differences among the three groups. The immersion learners' use of emotion lemmas (M = 6.77, SD = 1.26) was significantly higher than the FL learners' CEFR B use of emotion lemmas (M = 5.90, SD = 1.02), $p = 0.008$. No significant differences were found between the immersion learners and the FL learners CEFR C, or between the FL learners CEFR C and the FL learners CEFR B. The main effect for language was significant F (1, 70) = 19.23, $p < 0.001$, indicating there were significant differences between the use of emotion lemmas in the English (M = 6.96, SD = 1.25) and the Arabic narratives (M = 5.96, SD = 1.03). However, the interaction effect between language and context of learning/proficiency was not significant F (2, 70) = 0.87, $p = 0.423$, indicating the use of similar values of English and Arabic emotion lemmas between the tested groups.

As for the proportion of emotion word tokens, the main effect for context of learning/proficiency was significant F (2, 70) = 5.38, $p = 0.007$, indicating there were significant differences among the focus groups. The immersion learners (M = 8.16, SD = 1.67) significantly used more emotion word tokens than the FL learners CEFR B (M = 7.05, SD = 1.36), $p = 0.020$. The immersion learners (M = 8.16, SD = 1.67) have also significantly used more emotion word tokens than the FL learners CEFR C (M = 7.45, SD = 1.31), $p = 0.036$. No significant differences were found between the FL learners CEFR C and the FL learners CEFR B. The main effect for language was not significant F (1, 70) = 1.83, $p = 0.180$, indicating that the use of emotion word tokens between English

and Arabic were similar. Furthermore, the interaction effect between language and context of learning/proficiency was not significant F (2, 70) = 0.10, p = 0.908, indicating that the groups used similar values of English and Arabic emotion word tokens.

For the most part the quantitative analyses revealed no influence of L2 (English) on the L1 (Arabic), or vice versa. To explain the influence of language on another, and whether there truly is a crosslinguistic influence in the results, there are a number of factors that need to be considered to count as evidence of CLI namely: similarities within the groups, differences between the groups, as well as crosslinguistic performance congruity between individual features of the L1 and the L2, and evidence of the L2 in the use of the L1, or vice versa (Jarvis 2016; Jarvis & Pavlenko 2010). There were no differences between the control groups, i.e. the English native speakers and the Arabic monolinguals, in their use of emotion lemmas and emotion word tokens. Furthermore, even though the immersion learners used more emotion words and produced longer narratives than the FL learners in the L1 and the L2, there was no systematic statistical evidence of CLI effects from the planned comparisons in the analyses. To further elaborate, the immersion learners used more emotion lemmas in their Arabic narratives than the rest of the groups and there were statistical differences in their use of emotion lemmas when compared to the FL learners CEFR B. However, these differences were not reflected in the English data, where no differences were found in the use of emotion lemmas between these two groups even though the immersion learners used more emotion lemmas in their English narratives.

The immersion learners approximated the English native speakers in the length of their narratives and had longer narratives in their L1 and L2 than the rest of the Arabic speaking groups, namely the Arabic monolinguals and the FL learners. But despite the differences found in the length of the narratives between the control groups, the increase of the immersion learners' L2 narratives did not affect the L1 narratives since the

immersion learners did not significantly differ from the Arabic monolinguals, therefore a crosslinguistic influence, specifically an influence of the L2 on the L1, on the length of the narratives cannot be assumed. The immersion learners' use of longer narratives can be taken as a sign of successful foreign language learning and grasp of the L2, which may be due to the context of learning. It is also important to note that having the immersion learners have longer narratives than the other FL learning groups may be due to the fact that they might have wanted to impress the researcher with more detailed narratives knowing that their English was being tested, which also explains their use of longer L1 narratives.

Nevertheless, the corpora seem to be comparable for even though English narratives were longer, this did not increase the use of emotion words as opposed to the Arabic narratives. This means that the emotions were described with a similar number of words in the *excitement* clips across all of the language groups. Therefore, there is no crosslinguistic influence to be found when it comes to the variety and richness of the emotion vocabulary, rejecting in this case Hypothesis 2 when applied to the proportion of emotion words used in the narratives.

5.2.2: Factors that affect the use of L2 English emotion vocabulary

One of the research questions revolves around attempting to discover the factors that aid the learning, understanding, and use of emotion vocabulary in the foreign language. In other words, what independent variables affect the study's dependent variables; this section looks at the use of emotion lemmas and emotion word tokens. Although the research question looks at the variables or factors in the use of the target emotion words, this part of the analyses provides further insight on the effect of these factors in the use of emotion words in terms of richness and diversity. Hypothesis 3 states that English proficiency, the context of learning of English, the frequency of use of English, and the age of acquisition of English will facilitate the identification and use of

the emotion word *excitement*, this part of the analyses partly tests this hypothesis in terms of variety and richness of emotion word use in English.

The tables and tests reported in the previous section compared the schooling contexts and proficiency by comparing the different groups which resulted in providing evidence of a group affect of these variables in foreign language learning in Kuwait on the use of emotion words in the narratives and the length of the narratives. However, there may be other variables or factors such as a further examination of English language proficiency, as well as the age of acquisition of English, frequency of use of English, gender, and language dominance that might have affected the use of emotion vocabulary in the narratives.

For English language proficiency, participants with proficiency score CEFR C were compared with the participants with proficiency score CEFR B regardless of the context of their foreign language learning. A series of independent sample t-tests on the 3 dependent variables: the proportion of emotion lemmas, the proportion of emotion word tokens, and the proportion of total word tokens were conducted. Independent sample t-tests revealed no significant differences found in the proportion of emotion lemmas or the proportion of emotion word tokens, $p > 0.05$. Nevertheless, significant differences were found in the length of their narratives, i.e. the proportion of total word tokens, $t(71) = -2.558$, $p = 0.013$ (equal variances assumed) in which those with CEFR C proficiency produced longer narratives than the rest of the groups. From these results, we can infer that perhaps language proficiency plays a lesser role than context of learning of the L2, specifically the immersion context, in cases where there is partial equivalence in the diversity and production of emotion words in the L2. In other words, language proficiency alone is not the sole factor that facilitates the use of English emotion words in Kuwait.

Moreover, a Pearson correlation was run to measure whether or not the age of acquisition of English played a part in the lexical diversity of the narratives and the emotion vocabulary since there are more than three age groups to compare. The age of acquisition ranged from age 4 to 8 years old, so the independent variable was the age which had 5 levels: 4, 5, 6, 7, and 8. For the clips focusing on *excitement*, no significant correlations were found in the proportion of emotion lemmas, the proportion of emotion word tokens, or the proportion of total word tokens, $p > 0.05$, indicating that perhaps the age of acquisition of the English did not affect their lexical diversity or variety of emotion use.

One-way ANOVA was also conducted to measure whether or not the frequency of use of the English language affected their lexical diversity. Frequency of learning ranged from 3 to 5 on the given Likert scale on their questionnaires since there were 3 age groups to compare, i.e. the independent variable frequency of use had 3 levels: 3, 4, and 5. The test revealed no significant differences in the proportion of emotion lemmas, the proportion of emotion word tokens, or in their narrative length, $p > 0.05$, hence the frequency with which they used their foreign language, i.e. English, did not affect their lexical productivity of their narratives or their emotional vocabulary in the *excitement* narratives.

Additionally, independent sample t-tests were conducted to test whether gender might have an effect on the richness of the narratives and on the use of emotion vocabulary. The reason why independent sample t-tests were used is because it compares the means of two groups on the same dependent variable. Both in the Arabic and English corpora of the *excitement* data, no gender effects were found on the richness of emotion vocabulary or on narrative length, $p > 0.05$.

Furthermore, the questionnaire also inquired about which language the participants felt more dominant in, whether it was their L1 (Arabic) or their L2 (English).

Independent sample t-tests were run to compare the dominance of language on the use of emotion vocabulary and on the length of the narratives. Results revealed that language dominance had no immediate effect on the use of emotion words or on the length of the narratives, $p > 0.05$.

There were no effects of age of acquisition, frequency of use of English, gender, or language dominance found on the richness of emotion vocabulary or on the length of the narratives. Language proficiency, on the other hand, had an effect on the length of the narratives, but not on the productivity and richness of the emotion vocabulary. Therefore, Hypothesis 3 is rejected when applied to test the richness and variety of L2 emotion words for all of the tested factors apart from context of learning.

Even though CLI effects were not found in the use of emotion words, results showed effects of context of learning of the L2 on the use of emotion words in the narratives. As suggested from the results above, there is no crosslinguistic influence found in the richness of the narratives or in the productivity and size of emotion vocabulary since the differences found in the English narratives were not reflected in differences in the Arabic narratives. Nonetheless, there might be a crosslinguistic influence on the use of the target emotion word, in this case, *excitement*.

5.2.3: Target word use – *excitement*

This section focuses on the analysis of the target word use of *excitement* and the similarities and differences that may be found between the groups. The following analysis further tests Hypothesis 1, which states that no differences will be found between the immersion learners' use of L2 English emotion words and the emotion words used by the English native speakers. Meanwhile, the non-immersion learners' English answers will differ slightly from the English native speakers. This analysis will test the hypothesis with focus on the differences on the use of the target emotion word *excitement.*

All instances of the use of the emotion word *excitement* in any of its derivatives whether *excited*, *exciting*, or *excitement* were counted. Table 5.3 summarizes the frequency of the use of the target word *excitement* (and all other derivations) across the English native speakers, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B. The table indicates the number of participants who have used the target emotion word in each clip.

Table 5.3: Frequency of the use of the target emotion word *excitement* between the participants indicating the speakers who used the target word against the total number of participants and the percentage of use:

Clip	*N* of participants/*N* of English native speakers (percentage)	*N* of participants/*N* of Immersion learners (percentage)	*N* of participants/*N* of FL CEFR C (percentage)	*N* of participants/*N* of FL CEFR B (percentage)
Clip 1	15/15 (100%)	31/31 (100%)	26/32 (81.25%)	7/10 (70%)
Clip 2	15/15 (100%)	27/31 (87%)	15/32 (46.8%)	3/10 (30%)
Clip 3	15/15 (100%)	29/31 (93.5%)	22/32 (68.7%)	4/10 (40%)
Clip 4	15/15 (100%)	31/31 (100%)	27/32 (84.3%)	6/10 (60%)
Clip 5	15/15 (100%)	31/31 (100%)	28/32 (87.5%)	6/10 (60%)

The table shows that all of the native speakers of English used the emotion word *excitement* in their narratives in all of the five clips. Immersion learners also used *excitement* in all of their narratives of clips 1 (airport scene), 4 (Disney advertisement), and 5 (Thomas the Train), while a small number opted to use other emotion words in clips 2 (children fishing) and 3 (birthday boy), nevertheless, the majority have used *excitement* in their narratives. The numbers decreased in the foreign language classrooms and lessened with those of lower English language proficiency as well.

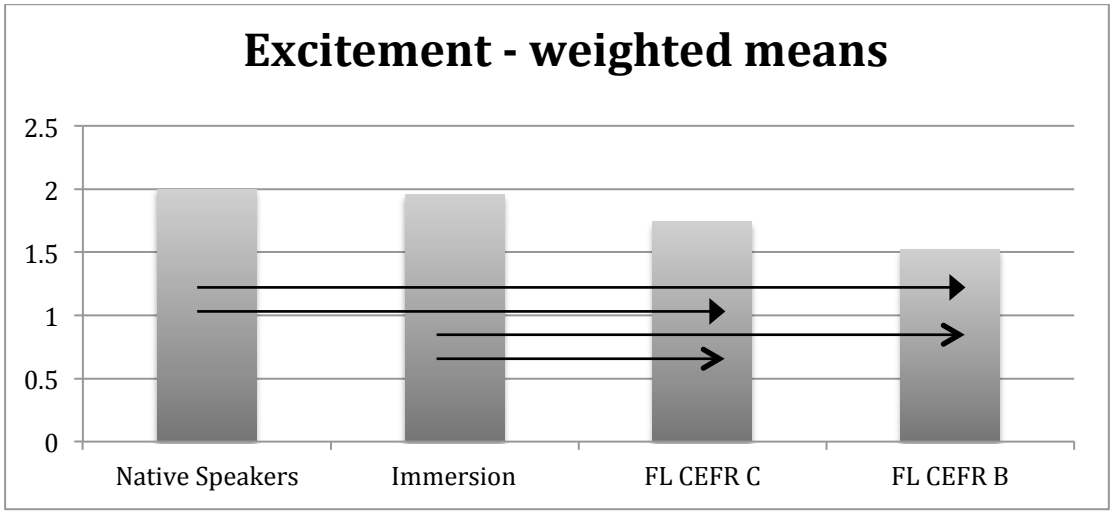
In order to further explain and understand the use of the target word *excitement* in Table 5.3, Table 5.4 summarizes the combined total of all the clips along with the weighted means, i.e. weighted average, for each tested group. The weighted mean was calculated instead of the arithmetic mean because the use of the target emotion word does

not equal not using it; therefore, when the target emotion word was used it was given more weight in the calculation.

Table 5.4: Combined total of use of target emotion word *excitement* indicating the sum, percentage of total sum, and weighted mean:

Context of Learning/Proficiency		Use of target emotion word	No use of target emotion word
Native Speakers of English *N* = 15	Sum	75	0
	% of Total Sum	100%	0%
	Weighted Mean	2.00	
Immersion Learners *N* = 31	Sum	149	6
	% of Total Sum	96.13%	3.87%
	Weighted Mean	1.96	
FL Learners CEFR C *N* = 32	Sum	118	42
	% of Total Sum	73.75%	26.25%
	Weighted Mean	1.74	
FL Learners CEFR B *N* = 10	Sum	26	24
	% of Total Sum	52%	48%
	Weighted Mean	1.52	

Figure 5.1: The weighted means of the use of the target emotion word *excitement* across all groups namely: Native speakers of English, Immersion learners, FL learners CEFR C, and FL learners CEFR B:



The arrows indicate where statistical differences are between the groups.

Evident from the percentages and weighted means in Table 5.4, and as evident from Figure 6.1 showing the weighted means of the use of the target emotion word *excitement*, the English native speakers used *excitement* the most, followed by the immersion learners, who were then followed by the FL learners CEFR C, and then the FL learners CEFR B. Therefore, statistical tests were required to test whether significant differences existed between the groups in the use of *excitement*.

One-way ANOVA was conducted to test whether or not differences exist between the different groups of participants from different learning contexts/proficiencies (independent variable) namely the native speakers of English, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B in their use of the target emotion word, i.e. the total number of times the word *excitement* was used (dependent variable). Significant differences were revealed between the groups in the use of the target emotion word *excitement* in the clips $F(3, 87) = 29.539$, $p < 0.001$. Bonferroni post hoc analyses revealed differences between the English native speakers and the FL learners CEFR C and FL learners CEFR B, $p < 0.001$ in both tests. There were also differences between the immersion learners and the FL learners CEFR C and FL learners CEFR B, $p < 0.001$

and $p < 0.001$ respectively. Further to add, no differences were found between the English native speakers and the immersion learners in the use of the target emotion word *excitement*. Therefore, from the analyses, Hypothesis 1 is accepted for the immersion learners since no differences were found between them and the English native speakers on the use of the target emotion word, but rejected for the FL learners since significant differences were found between them and the English native speakers.

5.2.4: Factors that might have affected the use of the target word *excitement*

As for the other factors that might have affected the use of the target emotion word in addition to context of learning, the influence of English language proficiency, age of acquisition of English, age of acquisition of the word *excitement*, frequency of use of English, frequency of use of emotion *excitement*, gender, and language dominance were tested. This part of the analyses further tests Hypothesis 3, which states that English proficiency, the context of learning of English, the frequency of use of English, and the age of acquisition of English will facilitate the identification and use of the emotion word *excitement*.

The two different proficiency groups were compared to test the role of English language proficiency in the use of the target emotion word *excitement*. Independent sample t-tests revealed a difference between the two proficiency groups CEFR C and CEFR B $t(71) = -4.784$, $p < 0.001$ (equal variances assumed). Participants with proficiency rating CEFR C used a higher count of *excitement* than those with proficiency rating CEFR B ($M = 4.23$ vs. $M = 2.60$). As opposed to the role of English language proficiency in the production of the number and variety of emotion words in the L2, English language proficiency plays a greater role in the use of L2 specific emotion words in cases where there is a partial equivalence.

As for the age of acquisition of English, it was measured using Pearson correlation tests. The age of acquisition of English ranged between 4 and 8 as per the

participants' questionnaire answers on their age of onset of English language learning. The independent variable in this case had 5 levels: ages 4, 5, 6, 7, and 8. There was a small correlation between age of acquisition of English and the use of the target word *excitement* $r = -0.281$, $p = 0.016$.

As for the age of acquisition of the emotion word *excitement* and how early exposure to the word might have facilitated its understanding and use, a Pearson correlation test was used to compare differences between the ages 6 and 13 whereby the independent variable age of acquisition had 8 levels: 6, 7, 8, 9, 10, 11, 12, and 13. These ages were inquired during the interview in which they were asked about their approximate age of learning the word *excitement* in school (the most used age was 6). Tests revealed a moderate correlation between age of acquisition of *excitement* and the use of the target word $r = -0.573$, $p < 0.001$, revealing that the younger the participants were when learning the word *excitement*, the more likely they were to have used and understood the emotional contexts of the English emotion word *excitement*.

Furthermore, one-way ANOVA was run to measure the effect of the frequency of use of English since the most used were scales 3 and 4. Frequency of use was scaled from 1 to 5 on a Likert scale in the questionnaire, 1 being the lowest, and 5 being the highest. There was no statistical significance to be found between the frequency of use of English and the target word *excitement*, $p > 0.05$.

As for the frequency of use of the emotion word itself, taken from their interview answers, i.e. how frequently they use the target word *excitement* in their daily lives. Significant differences were found on scales from 2 to 5 (the most used were scales 3 and 4), $F(3, 72) = 11.648$, $p < 0.001$. Therefore, the more frequently they used their language may not be as important as the frequency in which they use the emotion word itself in their daily lives.

Additionally, testing the role of gender in the use of the target emotion word, independent sample t-tests revealed no differences between the males and females in the use of *excitement* t (86) = -0.921, $p = 0.360$ (equal variances assumed). No direct gender influence can be assumed in the use of the target emotion words as the results revealed that the use of *excitement* or lack of was not affected by gender.

Finally, independent sample t-tests were run comparing those dominant in English against those dominant in Arabic according to the participants' answers in the questionnaire they filled prior to the narrative elicitation tests. These independent sample t-tests also revealed that there was no affect of language dominance, whether Arabic or English, on the use of the target emotion word *excitement* t (71) = -1.629, $p = 0.108$ (equal variances assumed).

To sum up, the use of *excitement* in the narratives was linked to the context of learning where the word *excitement* occurred more in the immersion learners' narratives than in the FL learners' narratives, and to L2 proficiency, the age of acquisition of English, the age of acquisition of the emotion word *excitement*, and the frequency of its use. On the other hand, the frequency of use of English, gender, and language dominance did not have an effect on the use of *excitement*.

Having looked at and compared the use of the target emotion word *excitement* between the groups, which provides interesting data, there remains yet another important aspect in the narratives that needs to be looked at and compared across the groups and languages in focus. The different emotion words used to describe the characters' emotions in the five clips might offer evidence of possible crosslinguistic influence effects when examining the lexical choices made between Arabic and English in comparison to the equivalent control groups, providing further answers for Research Question 2, and further testing the respective Hypothesis. Therefore, further analysis of the qualitative data will be discussed in this upcoming section, which also provides the

analysis of the references made to the emotional display of *excitement,* and whether any differences exist between the groups. Analysing the interviews that were conducted after the narrative elicitation tests can provide further clarification, support, and insight.

5.3: Results from analyses utilising NVivo

This section first focuses on the emotion lexical choices used to describe the clips in order to compare the use of emotion words between English and Arabic as used by the immersion learners, the FL learners, and the L1 speakers of the English and Arabic control groups. This is to examine the differences between them and possible CLI effects when learning the partially equivalent English emotion word *excitement,* thus providing possible answers for Research Questions 1 and 2. This is then followed by comparing the participants' use of expressions referring to any associated physiological reactions that may be linked to *excitement*, which might provide answers as to whether or not the English and the Arabic languages pay more or less attention to the physiological aspects of the emotion, and more importantly, should differences exist, whether these differences are reflected in the learners' groups. This also examines whether learning an L2 specific emotion word influences the way this emotion is perceived and how the emotional display is interpreted in the L1. This provides possible answers for Research Question 4. Afterwards, the analyses then looks at the interview comparing the participants' answers in defining the English emotion *excitement*, how they define the emotion internally and externally, comparing the English word *excitement* with what they view as its closest Kuwaiti equivalent, and finally comparing the participants' language choice when expressing and using the target emotion word *excitement*. This will aid in providing additional data to further examine the influence of language learning on emotion words in the L1, or vice versa, and understand whether there truly are CLI effects by examining whether there are lexical and conceptual shifts which can be further explained by their answers in the interview. The addition of the interview also aims to examine whether L2

learning of emotion words that are specific to the L2 causes a possible shift in the perception and interpretation of one's own emotions.

5.3.1: A comparison of the emotion words used to describe the *excitement* clips

To answer Research Question 1 regarding the differences in the learners' emotion lexical choices between the L1 and the L2 in comparison to the control groups this section provides answers from results on the *excitement* narratives. All instances of the use of emotion words in the narratives and all its derivations regardless of their plural or singular form, their morphosyntactic form, and gender state (in the Arabic cases) were counted as one. This section reports the use of emotion lemmas combined from the total of all the emotion words used in all five clips. Following is Table 5.5 summarizing the emotion lemmas used to describe the *excitement* clips in both the Arabic and the English narratives ordering the most frequently used words to the third/fourth most frequent. Lists of the words used to describe the *excitement* clips and the number of their occurrences (tokens) can be found in appendix G1.

Table 5.5: The emotion lemmas used to describe the *excitement* clips in the Arabic and in the English narratives by order of frequency of use:

Context of Learning/Proficiency	Arabic Emotion Words	Number of Lemmas	English Emotion Words	Number of Lemmas
English Native Speakers *N* = 15			*excited*	75 (73%)
			happy	26 (25%)
			ecstatic	2 (2%)
Immersion Learners *N* = 31	*mistānis* (happy)	138 (69.5%)	*excited*	149 (67%)
	mitḥammis (excited)	40 (20.5%)	*happy*	72 (32.5%)
	farḥān (happy)	11 (5.5%)	*ecstatic*	1 (0.5%)
	mitšawwig (looking forward to)	9 (4.5%)		
FL Learners CEFR C *N* = 32	*mistānis* (happy)	146 (80%)	*excited*	118 (50.5%)
	farḥān (happy)	16 (9%)	*happy*	114 (49%)
	mitšawwig (looking forward to)	11 (6%)	*ecstatic*	1 (0.5%)
	mitḥammis (excited)	9 (5%)		
FL Learners CEFR B *N* = 10	*mistānis* (happy)	48 (87%)	*happy*	36 (57%)
	mitḥammis (excited)	4 (7%)		
	farḥān (happy)	2 (4%)	*excited*	27 (43%)
	mitšawwig (looking forward to)	1 (2%)		
Arabic Monolinguals *N* = 17	*mistānis* (happy)	70 (65%)		
	farḥān (happy)	19 (17.5%)		
	mitḥammis (excited)	13 (12%)		
	mitšawwig (looking forward to)	6 (5.5%)		

The immersion learners and the FL learners CEFR C used a wider range and variety of emotion words in terms of using more than one emotion word in their descriptions. But this may be due to the larger number of participants when compared to the other groups, and therefore, the likelihood of using more than one emotion word in their descriptions increases, as well as the variety. However, it is important to note that the emotion words themselves are the same across all groups, and differed only in the number of occurrences.

To summarize the data presented in this section and possibly relating the results to Research Question 2 on CLI, all participants from all groups in all five clips predominantly used *mistānis* (happy) in their descriptions of the characters' emotions in the Arabic narratives, and this can be explained by the fact that the word *mistānis* (happy) in Kuwaiti is the most readily available and most frequently used emotion word in prototypical *exciting* situations. However, there is a noteworthy observation in the use of the Arabic emotion word *mitḥammis* (excited). Even though the word *mitḥammis* (excited) occurred in all of the clips amongst all of the groups, most of those who used *mitḥammis* (excited) were the immersion learners when compared to the rest of the groups in question ($N = 40$). It can be argued that the groups are not equal in size, but when focusing the comparison between the immersion learners and the FL learners CEFR C, evidence from the data suggests that the immersion learners have significantly used the word *mitḥammis* (excited) more than the FL learners CEFR C (20.5% vs. 5%). This could be interpreted as a possible L2 influence of the English word *excitement* that corresponds with the increased use of the English emotion *excited* between both groups (67% vs. 50.5%).

To further explain, the English language offers a clear distinction between *happiness* and *excitement; excitement* is more emotionally charged than *happiness* and is given a distinct word to express it. This distinction may be available in the Arabic

language but due to the low frequency of use of *mitḥammis* (excited) in the Kuwaiti dialect, whereby on a frequency Likert scale of 1 to 5 (1 being never, and 5 being always) the average frequency of use was $M = 2.5$ ($N = 34$), and *mistānis* (happy) in the Kuwaiti dialect is the emotion word that is more frequently used in situations of both *happiness* as well as *excitement*, in which the average frequency of use was $M = 4.5$ ($N = 34$).

Further to add, those taught in the immersion learning contexts are less proficient in their Arabic (Modern Standard Arabic - MSA) of where the emotion word *mitḥammis* (excited) comes from (self rated Arabic - MSA proficiency on a scale of 1 to 5, $M = 3$ vs. FL learners $M = 4.5$), than those who were taught in the public schooling systems (FL classrooms) since immersion classrooms are all taught in English. It is, however, important to note that the word *mitḥammis* (excited) is used as a borrowed form from the standard variety and is modified with vernacular syllable structure and phonological pattern. Nevertheless, due to the distinction that the English language provides between *happiness* and *excitement*, the immersion learners may have therefore used the closest L1 translation equivalent to the English *excitement*: *mitḥammis* (excited), even though it is not as frequently used as *mistānis* (happy). Their Arabic narratives displayed that these immersion learners were conscious about this *happiness/excitement* distinction and have clearly identified it.

As for the English data, from the presented data and percentages above, evidence suggests that when compared to the English native speakers, the immersion learners seem to model their performance in the way emotion words were used to describe the narratives as well as the increased number of the use of the word *excited*. Nevertheless, the FL learners CEFR C demonstrated a good grasp of the emotion of *excitement* and seemed to have mostly used the word *excited* in their descriptions, perhaps not quite modeling the native speakers, but coming quite close in doing so. Another notable

observation is the increased use of the emotion word *excitement* in the English narratives when compared to the Arabic narratives and the Arabic translation equivalents used in those narratives.

The data from the immersion learners, especially in their increased use of the emotion word *excited*, may explain their use of its Arabic counterpart in their Arabic narratives and increasing the possibility of an L2 influence on the use of L1 emotion words. Moreover, there could be a possible influence of the L1 Arabic on the use of the L2 English especially in the FL learners CEFR B data, whereby their English performance resembled that of their Arabic where they used *happy* in cases where they also used *mistānis* (happy) in their Arabic narratives, cases where other participants viewed as *exciting*.

Another notable observation is the contexts where the FL learners CEFR C and the FL learners CEFR B used *excited* the most in their descriptions, which were clips: 1 (airport scene), 4 (Disney advertisement), and 5 (Thomas the Train) especially for the FL learners CEFR C. There seems to be a pattern in their observations whereby the more active the character was and the more physical he/she were, *jumping* for example, the more likely they were to use the word *excited* in their descriptions. The same goes for when the clip displayed the prospect of something happening in the future as with the airport scene and the going to Disneyland scene. The word *excited* was used less in clips 2 (children fishing), and 3 (birthday boy) where the emotion was happening as a present situation and where there was less of a physical and facial reaction. Hence, why it is also important to look at how the participants made note of the physiological reactions of the characters in clips and how they relate those reactions to the characters' emotions.

5.3.2: Physiological references

In this section, instances or references to a physiological reaction to the context of the emotion in question in the projected clips were noted and compared to provide

answers for Research Question 4 which inquires about whether or not differences exist between the English and Arabic control groups in their observations of the emotional display of the target emotion words, and whether or not these observations are reflected in the immersion learners' and the FL learners' references of the emotional display in the L1 and the L2. Such references include physical states, gestures, facial expressions, etc. Since emotions are projected in the face and body, it can be taken as a sign of influence of language should the focus groups display a higher or lower attention to the facial and physical reactions which can be traced back to how the participants from the control groups pay more or less attention to the emotional physiological reactions associated with *excitement*. This part of the analyses looks at whether or not the use of another language influences the way the physiological reactions are interpreted and how the emotional experience is perceived. The analysis compares the tendency of observations made by the control groups of L1 and L2 and compares that across the focus groups in their attention and use of specific physiological observations.

For the clips narrated in Arabic, the references were translated into English for ease of reading and comparing. Instances where the main character(s) were visibly *jumping*, *clapping*, *dancing*, and *waving* were not counted since they were noted by most participants and were quite obvious in the clips. This comparison focuses on more specific observations made by the different participants.

In the Arabic data from clip 1 (airport scene), notable observations were made about not being in control of the body when feeling *excited* by saying the boy '*couldn't control himself*' (2 immersion learners), and was feeling '*energetic*' (2 immersion learners). In the English data, participants also claimed that the boy '*can't contain himself*' (2 native speakers, 1 immersion learner), another thought the boy was having '*a happy tantrum*' (1 immersion learners), while others said he was '*hyper*' (2 immersion

learners), and two explained he was '*releasing his energy*' (1 native speaker, 1 FL learner CEFR C).

There were no notable observations made to the face or body in clip 2 (children fishing). In the Arabic data from clip 3 (birthday boy), participants said the boy was '*smiling*' (1 Arabic monolingual, 2 immersion learners), and another said he was '*laughing*' (1 FL learner CEFR C). In addition, a participant also said that the boy '*couldn't control himself*' (1 immersion learner), and another said that the boy was '*moving a lot*' (1 immersion learner). As for the English data, a participant said the boy had *a 'beaming face*' (1 native speaker), and others said he was '*smiling*' (1 native speaker, 2 immersion learners). In terms of energy and movement, participants noted that the boy '*couldn't sit still*' (1 immersion learner), was '*moving very fast*' (1 FL learner CEFR C), was '*highly strung*' (1 native speaker), and was '*jittery*' (1 native speaker, 1 immersion learner).

As for clip 4 (Disney advertisement), there were no noteworthy observations made in the Arabic data, in the English data, however, a participant used the word '*adrenaline*' to describe the boy's emotion (1 immersion learner), while another noted that '*emotion showed on their faces*' (1 immersion learner). Moreover, a participant noted that the boy was '*laughing*' (1 immersion learner), while others also said that the boy was '*smiling*' (2 native speakers).

As for the Arabic data from clip 5 (Thomas the Train), participants said that the boy '*couldn't control himself*' (2 immersion learners, 1 FL learner CEFR C), and that the boy '*couldn't stop moving*' (1 FL learner CEFR C). As for the English data, a participant said that the boy was '*expressing with his whole body*' (1 FL learner CEFR C), and others noted that he was '*hyper*' (2 native speakers, 2 immersion learners, 1 FL learner CEFR C). Others noted he was '*jiggling*' (2 native speakers), '*jittery*' (1 native speaker), '*shaking*' (4 immersion learners, 2 FL learners CEFR C, 1 FL learner CEFR B),

'*spasming*' (1 native speaker), and was '*moving quickly*' (1 native speaker). As for the facial expressions, participants noted he was '*laughing*' (2 immersion learners), and '*smiling*' (1 native speaker, 1 immersion learner, 1 FL learner CEFR B).

When comparing the Arabic monolinguals and the English native speakers, we find that the attention and observations to the physiological reactions that are commonly associated with *excitement* were higher in the L1 speakers of English narratives than the L1 speakers of Arabic. In fact, there was only one participant from the Arabic monolinguals who made a note of the facial and bodily reaction to the emotion of *excitement* across all five clips.

This pattern is reflected in the patterns found in the references made by the participants from the focus groups, whereby the immersion learners made note of the physiological reactions more than the FL learners CEFR C, who in turn paid more attention to the links between the emotion and the bodily reactions than the FL learners CEFR B. Even though the group numbers were unequal, when comparing the immersion learners with the FL learners CEFR C who are almost equal in size, we find the immersion learners noting physiological reactions in their narratives more than the FL learners CEFR C. The same argument can be applied to the control groups who were also almost similar in group size. Moreover, the uses of such physiological reactions in the narratives were evident in the English narratives more than in the Arabic narratives.

Nevertheless, because of the partial equivalence between the emotion words *excitement* and its Arabic translation equivalents whether *miṯḥammis* (excited) or *mistānis* (happy), there were no obvious differences found between the control groups or in the focus groups in both their English or Arabic observations of the physiological reactions of the characters in the video clips. The immersion learners used more physiological references in both their L1 and their L2, which resembles the English native speakers, but this can be attributed to their better grasp of the English language

and/or their wanting to impress the researcher in their narratives, which also explains their longer narratives.

5.3.3: Interview analysis

Adding the interview was essentially needed to explain and understand the participants' choices of the emotion words used in the emotional descriptions in the narratives, and provide further insight on how the participants define and use the target emotion word *excitement*. Findings from the interview can help corroborate findings from the narratives, especially on the use of emotion words to determine whether there are CLI effects. Conceptual transfer in this case can also be detected in how the learners in the focus groups define *excitement* versus the language speakers of the control groups. The addition of the interview also examines whether or not having reached a level of language learning to a certain degree causes a possible shift in the perception of the participants' own feelings. The interview questions inquired about the definition of the target emotion word *excitement*. The interview then goes into further detail as to what the emotion entails internally, where the participant was to explain how they feel mentally, as well as how the emotion feels physically and how it is felt in the body. Participants were then to give the Arabic translation of the word, and then compare the perceived Arabic equivalent to the English in terms of emotional weight.

NVivo version 10 was also used to analyse the interview in which the questions were selected as nodes and the answers were grouped into codes. Due to some answers overlapping, they were grouped together as a single code where the wording differs but the meaning remains the same. As for the analysis itself, matrix coding tests were run where it collected the codes (answers) under each node (questions) against the groups, in other words, it cross-tabulates the answers to the questions as provided by the participants from each group.

5.3.3.1: Defining the target emotion word *excitement*

Inquiring about the definition of *excitement* may provide insight on how the different participants from different foreign language learning contexts and different English language proficiencies perceive what it means to feel *excited*. Any possible differences will be compared against one another as well as compared against how English native speakers perceive and define the same emotion. Any differences that may be found might provide explanations to their use of the target emotion word in their narratives. Furthermore, any differences that may be found can be compared against their use of English and Arabic lexical choices when describing the emotions portrayed in the video clips.

When asked to define *excitement*, it was defined as feeling impatient for what you want, looking forward to something that is going to happen, anticipation, being overwhelmed with happiness, the feeling you get when having something very positively surprising happen, and the feeling one gets when experiencing something for the first time. The definitions given included at least one or more of these categories as what makes up the feeling of *excitement*. Native speakers of English predominantly defined *excitement* as a 'looking forward to something happening in the future and a feeling of anticipation' 58.5%, as well as 'being overwhelmed by a surge of happiness' 33.5%. 4% of the answers included 'being pleasantly and positively surprised', and another 4% included 'experiencing something positive for the first time'.

Interview answers from the immersion learners also mostly defined *excitement* as 'looking forward to a positive something in the future' 64%, and 'being unable to wait from all the happiness at having this something happen' 15%, while also 'finding surprises a cause of such emotion' 9%. 6% of the immersion leaners' definitions also included 'feeling overwhelmed', and another 6% included 'first time experiences'. Very much like the immersion learners, the FL learners CEFR C defined *excitement* as

'looking forward to something' 48%, 'not being able to wait for it to take place' 19%, 'feeling overwhelmed' 14%, and also including 'surprises' 9.5% as well as 'first time experiences' 9.5% in their definitions. As for the FL learners CEFR B, they defined *excitement* as 'looking forward to something' 50% and 'experiencing something for the first time' 50%.

The definitions given by the immersion learners and the FL learners CEFR C do not seem to differ from the definitions given by the English native speakers. The only difference found is in the FL learners CEFR B answers where they gave a limited number of definitions and agreed on two 'looking forward to something' and 'experiencing something for the first time'. This could have been affected by their lower proficiency level, but it could have also been affected by their small sample size. It does, however, clarify the participants' use of *excited* or *excitement* in the clips whereby the FL learners CEFR B mostly used derivatives of *excitement* to describe the emotions of the characters that were expecting something to happen in the near future such as the airport scene and the Disneyland scene, and experiencing something for the first time which is also reflected in the airport scene as the child is about to go on an airplane for the first time. Nevertheless, no obvious differences were found in how the participants' defined *excitement* as definitions were more or less agreed on across all groups, however, differences may still be found in how they defined or explained how they feel the emotion.

5.3.3.2: Feelings associated with *excitement*

Because of the similarity in the definition of the English word *excitement* to its Arabic equivalents, participants were to describe how it was to feel *excited*, in other words what *excitement* entails mentally and emotionally, i.e. internally. Native speakers of English described *excitement* as 'feeling extremely happy' 52%, 'a feeling of happiness' 14%, 'a strong positive feeling' 14%, 'feeling ecstatic' 10%, as well as

‘feeling eager’ 10%. Immersion learners defined the feeling of *excitement* as ‘feeling very happy’ 66%, ‘eager’ 17%, ‘enthusiastic’ 10%, ‘happy’ 5%, and ‘positive’ 2%. As for the FL learners CEFR C, they described it as being ‘very happy’ 59%, ‘eager’ 24%, ‘feeling positive’ 7%, ‘happy’ 5%, ‘ecstatic’ 2%, and ‘thrilled’ 2%. As for the FL learners CEFR B, they defined *excitement* as a mix of ‘feeling very happy’ 47%, ‘happy’ 20%, ‘eager’ 20%, and ‘feeling positive’ 13%. Word clouds that visually show the most frequently used words in the participants’ explanations of how it is to feel *excited* emotionally were generated using word frequency tests and can be found in appendix H1.

There seems to be no difference in how the participants defined and explained how it is to feel *excited*, but this is not at all surprising due to the partial equivalence of the word, the ease of its learning, and the fact that the participants in question all have a considerably high English language proficiency whereby a partially equivalent and arguably universal emotion such as *excitement* can be easily learned and understood. On the other hand, a notable observation is that these definitions more or less apply to *happiness* as well, and so further investigation was needed to clarify whether the different participants understand the emotion of *excitement* and differentiate it from *happiness*. *Excitement* and *happiness* can be told apart from one another by means of comparing the physiological reactions that are associated with the said emotions, whereby *excitement* is more physically active. Therefore, participants were also asked to explain and describe the feeling of *excitement* in their bodies.

5.3.3.3: Physiological aspects of *excitement*

Because of the physiological differences between the emotions of *excitement* and *wanāsah* (n.)/*mistānis* (adj.) (happy), participants were also asked to describe how it feels physically to be *excited*, in other words what happens to their body when experiencing *excitement*, i.e. external reactions. The English native speakers mentioned ‘adrenaline’ 15%, having ‘a big smile’ 15%, ‘a burst of energy’ 15%, ‘feeling light’ 12%, ‘jumping’

12%, and ‘feeling active and having lots of movements and not being able to sit still’ 12%. They also mentioned ‘talking fast’ 7%, and having ‘their heart beating fast’ 7%. Others have also included ‘feeling tingly’ 4%. As for the immersion learners, they mentioned ‘smiling’ 20%, ‘adrenaline’ 15%, ‘jumping’ 15%, ‘moving a lot’ 10%, ‘feeling tingly’ 8%, ‘energetic’ 8%, ‘hyper’ 8%, and ‘feeling a rush’ 5%. They also mentioned ‘fast heartbeats’ 5%, ‘talking fast’ 2%, ‘feeling light’ 2%, and ‘clapping’ 2%.

As for the FL learners CEFR C, they described their physical changes to include ‘jumping’ 25%, ‘adrenaline’ 19%, ‘energy’ 12%, ‘lots of movement’ 10%, feeling ‘a rush’ 5%, ‘feeling light’ 5%, ‘clapping’ 3%, ‘fast breathing’ 2%, ‘fast heartbeats’ 2%, feeling ‘hyper’ 2%, and ‘talking quickly’ 2%. As for the FL learners CEFR B, they also described *excitement* to include ‘jumping’ 36%, ‘energy’ 21%, ‘smiling’ 14%, ‘laughing’ 14%, ‘feeling light’ 7%, and ‘moving a lot’ 7%. Word clouds that visually show the most frequently used words in the participants’ explanations of how it is to feel *excited* physiologically were generated using word frequency tests and can be found in appendix H2.

Similarly to the definitions and answers given in the previous interview questions, the definitions given for the physiological aspects of *excitement* were somewhat comparable, save for minor differences in the percentages. Nevertheless, all participates more or less agreed on the definition of *excitement* in terms of the anticipation, eagerness, energy, adrenaline, happiness, looking forward to something in the future, positive first time experiences, and positive surprises. This is not surprising due to the partial equivalence of the English emotion word *excitement* to the Kuwaiti words available. The low frequency of the use of the Kuwaiti equivalent *mitḥammis* (excited) perhaps suggests that having the participants predominantly use *mistānis* (happy) does not necessarily mean that they do not feel *excited*, they simply use the readily available and most frequent linguistic outlet to express emotions evident in their

use of *mistānis* (happy). The narratives from the immersion learners and the FL learners revealed interesting differences in their use of emotion words especially in the use of *excited* and *miṭḥammis* (excited) versus the use of *happy* and *mistānis* (happy). Further inquiries on their use of *mistānis* (happy) in the narratives as well as their Kuwaiti equivalent(s) translations of *excitement* were needed to clarify their lexical choices since the emotions of *excitement* and *happiness* differ in their physiological reactions and in their emotional weight.

5.3.3.4: Explanations on the use of *mistānis* (happy) in the *excitement* narratives

Since the majority of the participants from all tested groups mostly used *mistānis* (happy) in their Arabic narratives, but have a clear understanding on the definition and emotional weight and reactions of the English emotion *excitement* according to their answers in this interview, they were asked to further elaborate and clarify their use of *mistānis* (happy). 56% of the immersion learners explained 'that *mistānis* (happy) means *happy* and that *excitement* is a much stronger emotion', and 33% explained 'that it was because there was no available word to use in Kuwaiti Arabic that was easy to think of', while 11% explained 'that even though they used *mistānis* (happy), they meant it as *excitement* because the body movements were that of *excitement*'. 38% of the FL learners CEFR C explained 'that it was because we only have one available word in our dialect which is *mistānis* (happy)', and 31% said '*excitement* is stronger than feeling *mistānis* (happy)', while 17% said '*mistānis* (happy) and *excited* were essentially the same and that was why they used the word in their narratives', and 14% said 'it was because when one feels *excited* they also feel *mistānis* (happy), so they are used in the same situations'. 50% of the FL learners CEFR B said '*mistānis* (happy) and *excitement* were the same', and another 30% explained 'that it was because we use them as one word in our language', while 20% said 'it was because when you feel *excited* you also feel *mistānis* (happy) and they can be used in the same situations'.

Immersion learners unanimously agreed on the difference in weight and meaning between *excitement* and *mistānis* (happy) in their explanations on their use of *mistānis* (happy) in their narratives, and justified their use of *mistānis* (happy) to the quick and ease of its use in the Kuwaiti dialect as opposed to other Arabic emotion words that were equivalent to *excitement*. Nevertheless, while some FL learners CEFR C agreed on similar justifications made by the immersion learners, others stated that *excitement* and *mistānis* (happy) were essentially the same, while others explained that since *mistānis* (happy) is an element of *excitement* they can be used in the same emotional contexts. FL learners CEFR B also agreed with the FL learners CEFR C that *mistānis* (happy) in Kuwait is used as the English *excitement* and therefore justifies their use of *mistānis* (happy) in their narratives, while the majority agreed on *mistānis* (happy) being equal to *excitement*. Therefore, further inquiries were made on how these different participants translated the English emotion word *excitement* into Kuwaiti Arabic.

5.3.3.5: Kuwaiti equivalent(s) of the English emotion word *excitement*

The interview also included discussing the meaning of *excitement* in Kuwaiti Arabic, as participants were asked for the closest equivalent to *excitement* which may further explain both their English and Arabic lexical choices in describing the characters' emotions, and more importantly support whether or not a crosslinguistic influence exists should the participants offer translations that might have been affected by their foreign language learning. Immersion learners translated *excitement* to mean *mitḥammis* (excited) 71%, *mistānis* (happy) 26%, and *mitšawwig* (looking forward to) 3% in Kuwaiti Arabic. On the other hand, the FL learners CEFR C translated *excitement* into *mistānis* (happy) 44%, *mitḥammis* (excited) 34%, and *mitšawwig* (looking forward to) 22%. As for the FL learners CEFR B, they translated *excitement* as *mitḥammis* (excited) 42%, *mistānis* (happy) 42%, and *mitšawwig* (looking forward to) 17%.

Those who learned their English in the immersion setting were the majority of the participants that translated *excitement* as *mitḥammis* (excited) as opposed to the rest who have also included *mitḥammis* (excited) into their definitions. These immersion learners were able to identify the difference between *happiness* and *excitement*, which was also evident in their emotion word use in their narratives. Most of the immersion learners were more conscious of separating the two emotions than translating them as one such as the use of *mistānis* (happy) as an equivalent of *excitement*.

Another observation is in the use of *mitšawwig* (looking forward to), whereby the majority of the participants that paired this emotion word with *excitement* were the FL learners. This perhaps explains their use of the English word *excitement* in their descriptions whereby the clips that depicted a future prospect (airport scene and Disney advertisement) were the ones where the FL learners used derivatives of the English emotion word *excitement* the most when compared to the rest of the video clips. Therefore, as evident from the analysis of the data so far, FL learners used the English emotion word *excitement* in situations where they noticed active physical movements such as jumping, and in situations where there was a positive future prospect. The Arabic counterparts as evident from their narratives were either *mistānis* (happy) or *mitšawwig* (looking forward to). The use of *mitḥammis* (excited) was mostly prevalent among the immersion learners, who were also the ones that have mostly provided *mitḥammis* (excited) as a translation equivalent to *excitement.*

Participants were then further probed to explain why they gave such pairings or translation equivalents for *excitement,* which may further explain their lexical choices in the narratives. Those who said that *mitḥammis* (excited) and/or *mitšawwig* (looking forward to) were equivalents to *excitement* were asked whether they thought that *mitḥammis* (excited) and/or *mitšawwig* (looking forward to) were equal to *excitement* in terms of emotional weight and valence. Answers from the immersion learners included:

'yes' 75%, '*excitement* is stronger' 15%, and that '*mitḥammis* (excited) and/or *mitšawwig* (looking forward to) are different from *excitement*, since *excitement* combines *happiness* and eagerness and anticipation' 10%. Answers from the FL learners CEFR C included: 'yes' 63%, '*excitement* is stronger' 22.2%, that '*mitḥammis* (excited) is stronger in weight' 7.4%, that 'they were close, yet *excitement* remains slightly stronger' 3.7%, that 'they were different' 3.7%. Meanwhile, answers from the FL learners CEFR B included: 'yes' 60%, that '*mitḥammis* (excited) is stronger in weight' 20%, and that '*excitement* is stronger' 20%. While the majority of the participants viewed *mitḥammis* (excited) equal to *excitement*, the remaining few stated that *excitement* is a stronger emotion than the closest Arabic translation equivalents *mitḥammis* (excited) and/or *mitšawwig* (looking forward to). However, there were a number of FL learners CEFR C and FL learners CEFR B who found *mitḥammis* (excited) a stronger emotion than *excitement.*

In addition, those who translated *excitement* to mean *mistānis* (happy) in Kuwaiti were also asked whether or not they saw them as equal in emotional weight in order to explain their lexical choices in their narratives. Answers from the immersion learners included: '*excitement* is stronger' 46.1%, '*mistānis* (happy) means *happy,* while *excitement* is for something in the future and includes more movements in the body' 27%, 'in Kuwaiti they seem equal because they are used to express their feelings in similar situations even though they are not' 19.2%, and 'they do not think there is a Kuwaiti equivalent to the word *excited'* 7.7%. FL learners CEFR C thought that '*excitement* is stronger in English than it is in the Arabic *mistānis* (happy)' 43.7%, '*excitement* is for a future event' 25%, 'yes' 18.7%, and 'they are equal because they are used in the same contexts and situations' 12.5%. 60% of the FL learners CEFR B answered that '*mistānis* (happy) is equal to *excitement*'; while the remainder 40% said that '*excitement* in English is stronger, but in Arabic they are the same'.

The immersion learners clearly separated being *mistānis* (happy) from being *excited*, not only as different emotions in emotional weight, but also different in situational contexts and different in physiological reactions and movements. The only reason why *mistānis* (happy) might be used in contexts of *excitement*, some explained, is because there is no equal equivalent in Kuwaiti that is frequently used, and so both are used in the same situations or contexts. Meanwhile, while most of the FL learners CEFR C agreed on *excitement* in English being a stronger emotion than the Arabic *mistānis* (happy), the rest further explained that they perceived the English word *excitement* as an emotion that is mostly felt for a future event, but that it equals *mistānis* (happy) in meaning and in emotional contexts since they are both used in similar situations in Arabic. The majority of the FL learners CEFR B viewed *mistānis* (happy) equal to *excitement*, while the rest identified the English word *excitement* as a stronger emotion than the Arabic *mistānis* (happy) in English contexts, nevertheless, they further explained that *mistānis* (happy) is equal in meaning to *excitement* in Arabic contexts. This observation is quite interesting whereby they seemed to find the English emotion word of stronger emotional weight, but they still described the Arabic word *mistānis* (happy) equal to the English *excitement* in meaning.

As a further measure, they were asked whether they perceived any difference between the English emotions *happiness* and *excitement*. The reason why they were asked such a question was to further understand whether or not those who perceived *mistānis* (happy) equal to feeling *excited* perceived a difference between the English *happiness* and *excitement.* Since *mistānis* (happy) was used in the same emotional contexts as *excitement* in their narratives and interview explanations, there is the possibility of the lines between the Arabic equivalents of *happiness* and *excitement* being blurred. Therefore, perhaps the learning of a language that clearly separates *excitement* from *happiness*, when the language learner identifies such a difference, this can perhaps

provide evidence of crosslinguistic influence. This can either be evident in the differentiation between *happiness* and *excitement*, in which case this can be seen as evidence of L2 influence on the L1, or seeing no difference between *happiness* and *excitement*, this can be seen as evidence of L1 influence on the L2.

The immersion learners explained that '*happiness* is for the present, while *excitement* is for the future' 25%, '*happiness* is long term, while *excitement* is a temporary emotion' 15%, '*excitement* is a stronger emotion' 15%, '*excitement* is more physical' 12%, 'that *happiness* is more felt on the inside' 12%, '*happiness* is included in *excitement* but not the other way around' 8%, and 'that *excitement* needs a trigger' 4%. The FL learners CEFR C explained 'that *happiness* is for the present, while *excitement* is for a future event' 34%, 'that *happiness* and *excitement* were the same' 31%, others felt 'that *excitement* is stronger' 19%, 'that *excitement* has an element of surprise' 9%, and 'that *happiness* is a more long term emotion than *excitement'* 6%. The FL learners CEFR B explained 'that *happiness* and *excitement* were the same' 40%, 'that *excitement* is stronger' 20%, 'that they might differ in body movements, but on the inside they were the same' 20%, 'that *happiness* is more frequent than *excitement*' 10%, and 'that *happiness* is included in *excitement* and *excitement* in included in *happiness'* 10%,

A notable observation is that all immersion learners as well as two thirds of the FL learners CEFR C and two participants from the FL learners CEFR B were able to differentiate between the emotions of *happiness* and *excitement*. The rest of the FL learners CEFR C and the majority of the FL learners CEFR B, however, did not perceive that much of a difference between *happiness* and *excitement* which corresponds with their comparisons between the English *excitement* and the Arabic *mistānis* (happy). This possibly provides evidence of a possibility of an L1 influence on the L2, as well as an influence of the L2 on the L1 depending on the participants' language learning context and English language proficiency.

5.4: Further qualitative observations from the narratives

Qualitative analysis of narratives from previous studies on emotion words found evidence of crosslinguistic influence in the form of semantic extension, conceptual transfer, lexical borrowing, loan translation, and avoidance (Jarvis & Pavlenko 2010; Pavlenko 2008d; 2014). In the analysis of the *excitement* narratives, there were 5 instances of lexical borrowing using the L2 English emotion word *excited* when describing the emotions of the characters' in L1 Arabic. These instances of lexical borrowing were made by different immersion learners, while this is not observed in the rest of the FL learners groups. Following are two examples:

Example 1 from Clip 1 (airport scene):

> ṣbaī ṣɣayyir . . . qāʿid ynāqiz min ʾilwanāsah laʾanna bisafir ʾawwal marra . . . kān wāyid *excited* . . . mādri šlōn ʾafahhmitš šinu *excited* bilʿarabi bilḍabṭ

Translation:

> *a young boy . . . he was jumping for joy to be flying on an airplane for the first time . . . he was very excited . . . I do not know how to describe excited to you in Arabic exactly*

Example 2 from Clip 5 (Thomas the Train):

> ʾilyāhil ʾawwal marra yšūf qiṭār jiddāmah ʿala ʾarḍ ʾilwāqiʿ . . . w lamma šāfah kān wāyid *excited* . . . mā ʾaʿarif šlōn agūlha . . . yimkin *mistānis* bs ʾakθar bwāyid . . . w qāʿid ynāqiz

Translation:

> *a little boy sees a real live train before his eyes for the very first time . . . and when he laid his eyes on it he was very excited . . . I do not know how to explain it . . . maybe he was happy . . . no he was more than that . . . he was jumping*

These two examples reveal the participants facing difficulty in explaining the emotion of *excitement* in Arabic.

Other examples from the narratives revealed further evidence of a possible L1 influence when speaking in the L2 in the form of loan translation, which is when concepts or terms in one language is used when using another. This was observed in one

of the FL learners CEFR B narratives, while none of the immersion learners displayed such evidence.

Example from Clip 1 (airport scene):

> a little boy in maybe the airport I think . . . yes airport . . . there is a plane . . . he is jumping up and down like crazy . . . he is like what do you call it . . . he is like he is flying from his farḥa . . . you know? like he is very happy

The use of *flying from his farḥa (happiness)* is a literal translation of the Kuwaiti metaphor 'ṭāyir min *ʾilfarḥa*'.

5.5: Summary

To summarize the findings from the *excitement* data so far, in cases of partial equivalence there was no evidence of crosslinguistic influence on the length of the narratives, the use of emotion lemmas, or the use of emotion word tokens. In other words, there was no evidence of an influence of the use of the L2 on the L1, or the L1 on the use of the L2 that can be traced back to the native speaker or the monolingual data as far as the richness of emotion words in the narratives. When focusing the analyses on the target emotion word *excitement*, evidence suggests that context of learning is the most important factor in increasing the use and understanding of the target word in question, followed by English language proficiency and age of acquisition. A distinct pattern emerges from the data with the immersion learners resembling the native speakers of English, followed by the FL learners CEFR C, and then the FL leaners CEFR B.

SPSS and NVivo results both provided examples of the immersion learners displaying evidence of L2 English influence on their use of L1 Arabic when describing the narratives. Evidence of internalization of the L2 specific patterns and concepts in the use of L1 emotion vocabulary was found in the immersion learners' ability to make a clear distinction between the English emotion word *excitement* and the Arabic emotion word *mistānis* (happy). This was also reflected in the distinctions they made between the Arabic *mistānis* (happy) and *mitḥammis* (excited) in their narratives. Additionally, their

definitions and explanations also differentiated between the English *happiness* and *excitement* and this was also reflected in their descriptions and explanations of the Arabic equivalents *mistānis* (happy) and *mitḥammis* (excited) in their interview. These distinctions differed from the ones made by some of the FL learners CEFR C and most of the FL learners CEFR B. The immersion learners' use and definitions of *excitement* can be explained by the patterns observed in the target language control group where the L2 English provides distinct words for the emotions *excitement* and *happiness* while the L1 Kuwaiti Arabic does not clearly differentiate between these two emotions. Additionally, they displayed an increased use of *mitḥammis* (excited), the closest Arabic equivalent to the English *excitement,* in their Arabic narratives as well as in their translations when compared to the FL learners and the Arabic monolinguals, even though *mitḥammis* (excited) is not as frequently used as *mistānis* (happy) in the Kuwaiti dialect. Furthermore, there were also examples of some immersion learners facing difficulties in lexical retrieval when narrating the *excitement* video clips in the L1, while displaying ease when narrating the same video clips in the L2, and displayed evidence of lexical borrowing in their use of their L2 when speaking in their L1, which also provides possible evidence of an L2 influence on the L1.

Further evidence from the data, although not as strong due to the small number of participants, also suggests that due to the partial equivalence between *excitement* and *mistānis* (happy) and possibly due to the constrictions the Kuwaiti dialect has in providing an emotion word that is equivalent to the English word *excitement*, leading to a negative transfer or the possibility of an L1 influence on the use and understanding of the English emotion word *excitement*. To elaborate on the L1 influence on the L2 conceptualization of the target emotion words in the FL learners' data, as previously mentioned there were cases where the FL learners failed to make a clear distinction between *excitement* and *mistānis* (happy) in their narratives and interview, which also

corresponds with their lack of a distinction between the English emotion words *excitement* and *happiness.* This pattern is similar to the patterns found in the L1 Kuwaiti Arabic monolingual's use of the Arabic *mistānis* (happy), since *mistānis* (happy) is frequently used in Arabic contexts where *excitement* would typically be used.

Such evidence from the immersion learners in comparison to the FL learners provides interesting results on the effects of foreign language contexts of learning as a factor in crosslinguistic influence. Further to add, this is not to say that Kuwaitis do not feel *excited* per se due to the lack of an emotion word in their dialect, and that the learning of a language that offers a clear distinct emotion word creates the opportunity to feel *excited*.

Chapter 6: RESULTS on *Frustration*

6.1: Introduction

As previously mentioned, previous studies have found that nonequivalent emotion words are harder to acquire than equivalent or partially equivalent emotion words. This task is made harder when learning a nonequivalent L2 emotion word in foreign language classrooms in the context of the L1. The central question this research aims to answer is whether or not there could be evidence of a crosslinguistic influence, specifically an L2 on the L1, when Kuwaiti foreign language learners of English from different learning contexts, immersion and FL classrooms, are presented with the same emotional scenarios depicting L2 specific emotion words, in how they might perceive and express emotions between their two languages, their L1 and their L2. Differences, if any, that can be compared to the patterns found in the Arabic control group can be taken as evidence of L1 influence on the L2; similarly differences that can be compared to the patterns found in the English control group can be taken as evidence of L2 influence on the L1.

This chapter reports results on the nonequivalent English emotion word *frustration* gathered from the questionnaires, narrative elicitations, and interviews. This chapter follows the same format as in the *excitement* chapter. It first reports the results of the quantitative analyses using SPSS and then the analyses using NVivo, followed by further analysis of the qualitative data. The quantitative analysis first applies SPSS to examine the lexical productivity of the English and Arabic narratives and the productivity and diversity of the emotion vocabulary used in those narratives. It compares the use of emotion lemmas, emotion word tokens, and the total word tokens between the control and focus groups as well as compares the use of emotion lemmas, emotion word tokens, and total word tokens between the two languages. The analysis then focuses on linking any differences between control and focus groups to possible

factors such as foreign language learning context, English language proficiency, age of acquisition of English, frequency of use of English, gender, and language dominance. Furthermore, the quantitative analysis examines the differences in use of the target emotion word *frustration*, and also identifies the possible factors that may have mediated the learning, understanding, and use of *frustration.*

The analysis of the qualitative data, i.e. narrative data, then compares the use of emotion words in the narratives between the groups and languages using NVivo. It examines the emotion lexical choices used to describe the clips comparing the use of emotion words between English and Arabic from both the focus and control groups. The analysis also examines the use of words related to the physiological reactions associated with their use (or lack of) of *frustration*. Following the analyses of the narratives, NVivo is used to examine the interview answers comparing the participants' definitions of *frustration*, how the emotion is defined between the mind and the body, and their Arabic translations of *frustration*. Further qualitative analysis takes a closer look at the narratives to find evidence of semantic extension, conceptual transfer, lexical borrowing, loan translation, codeswitching, and avoidance in the narratives. Examples in the form of excerpts are illustrated in this chapter, further examples of the narratives from the *frustration* data can be found in appendix E2.

6.2: Quantitative analysis

6.2.1: Lexical productivity and diversity of the narratives and use of emotion vocabulary

Table 6.1 summarizes the length of the narratives along with the productivity and richness of emotion word use in the English *frustration* clips. The results from the five clips did not show any noticeable major differences; hence data from the five clips were combined to allow a more robust statistical testing. The descriptive summaries of the narratives in terms of length and variety of emotion word use for each of the English *frustration* clips can be found in appendix F3.

Table 6.1: The lexical productivity of the English *frustration* narratives and productivity and richness of emotion words used in the narratives including: number of emotion lemmas, number of emotion word tokens, richness of emotion vocabulary – Uber type/token ratio (TTR), and number of word tokens:

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English Native Speakers *N* = 15	Sum	141*	154*	0.77	3938*
	Mean	9.40*	10.26*		262.53*
	SD	2.22*	2.34*		58.09*
Immersion Learners *N* = 31	Sum	244*	264	0.55	7436*
	Mean	7.87*	8.51		239.87*
	SD	1.94*	1.98		57.26*
FL CEFR C *N* = 32	Sum	220*	239*	0.78	7073
	Mean	6.87*	7.46*		221.03
	SD	1.45*	1.58*		48.22
FL CEFR B *N* = 10	Sum	63*	68*	1.23	1745*
	Mean	6.30*	6.80*		174.50*
	SD	1.05*	1.31*		47.37*

* Significant differences between the groups

In order to test Hypothesis 1, which states that both the immersion learners and the non-immersion learners' use of English emotion words will differ from the native speakers of English, while no differences will be found in their Arabic descriptions, it was important to look at the differences between the tested groups. At a significance level of 0.05, several series of one-way analysis of variance (ANOVA) were run to examine whether differences exist between the participants from different foreign language learning contexts and English language proficiency since ANOVA allows the comparison of means of four different samples. In this case, ANOVA compared one independent variable (groups) that has four levels: English native speakers, the immersion learners – proficiency CEFR C, the FL learners – proficiency CEFR C, and the FL learners – proficiency CEFR B. Each of these ANOVA tests examined the independent variable against a different dependent variable: the proportion of narrative word tokens, the proportion of emotion word lemmas, and the proportion of emotion word tokens.

One-way ANOVA on the proportion of number of word tokens (i.e. the length of the English narratives) revealed significant differences $F(3, 84) = 6.061$, $p = 0.001$ between the groups. Bonferroni post hoc analyses revealed significant differences between the native speakers of English ($M = 262.53$) and the FL learners CEFR B ($M = 174.50$) $p = 0.001$. There were also significant differences between the immersion learners ($M = 239.87$) and the FL learners CEFR B $p = 0.007$. Meanwhile, no differences were found between the English native speakers and the immersion learners or between the English native speakers and the FL learners CEFR C.

As for the use of emotion words, two separate one-way ANOVAs were run to compare the proportion of emotion lemmas and the proportion of emotion word tokens. ANOVA revealed significant differences in the participants' use of emotion lemmas $F(3, 84) = 9.156$, $p < 0.001$. Bonferroni post hoc analyses revealed differences between the English native speakers ($M = 9.40$) and the immersion learners ($M = 7.87$) $p = 0.041$, between the English native speakers and the FL learners CEFR C ($M = 6.87$) $p < 0.001$, and between the English native speakers and the FL learners CEFR B ($M = 6.30$) $p < 0.001$. No other differences were found between the rest of the groups. Significant differences were also found in the proportion of emotion word tokens $F(3, 84) = 10.078$, $p < 0.001$. Bonferroni post hoc analyses revealed differences between the English native speakers ($M = 10.26$) and the FL learners CEFR C ($M = 7.46$) as well as between the English native speakers and the FL learners CEFR B ($M = 6.80$) $p < 0.001$ and $p < 0.001$ respectively.

Hypothesis 1 states that differences will be found in the use of English emotion words between the L2 learners, i.e. immersion learners and the non-immersion learners, and the native speakers of English. Although differences were indeed found in the proportion of emotion lemmas between the L2 learners and the native speakers of English, as well as differences in the proportion of emotion tokens between the non-

immersion learners and the English native speakers, no differences were found between the immersion learners and the latter group in their use of emotion word tokens, thus partly rejecting the hypothesis.

As for the Arabic data, Table 6.2 displays the combined sum of word tokens used in the narratives along with the combined sum of the emotion lemmas and the combined sum of the emotion word tokens from clips 1 to 5 in the Arabic *frustration* clips. Details of each individual clip can be found in appendix F4.

Table 6.2: The lexical productivity of the Arabic *frustration* narratives and productivity and richness of emotion words used in the narratives including: number of emotion lemmas, number of emotion word tokens, richness of emotion vocabulary – Uber type/token ratio (TTR), and number of word tokens:

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	98*	110*	0.75	2520
	Mean	5.76*	6.47*		148.23
	SD	1.09*	1.66*		47.89
Immersion Learners *N* = 31	Sum	213*	252*	0.28	5065
	Mean	6.87*	8.12*		163.38
	SD	1.52*	1.99*		39.40
FL CEFR C *N* = 32	Sum	216	237	0.59	4912
	Mean	6.75	7.40		153.50
	SD	1.31	1.81		39.80
FL CEFR B *N* = 10	Sum	59*	64*	1.69	1315
	Mean	5.90*	6.40*		131.50
	SD	0.87*	1.26*		37.29

* Significant differences between the groups

As previously conducted in the analyses of the *excitement* data, a series of one-way ANOVAs were run to investigate whether there were any differences between the participants from different foreign language learning contexts and English language proficiencies in the Arabic data. No significant differences were found between the Arabic monolinguals, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B in terms of the proportion of the word tokens used in their narratives, i.e. length of the narratives, $F(3, 86) = 1.650$, $p = 0.184$. Nevertheless, significant

differences were found in the proportion of emotion word tokens F (3, 86) = 4.206, p = 0.008. Bonferroni post hoc analyses revealed a significant difference in the number of emotion word tokens used between the immersion learners (M = 8.12) and the Arabic monolinguals (M = 6.47) $p < 0.05$, as well as between the immersion learners and the FL learners CEFR B (M = 6.40) $p < 0.05$. Moreover, significant differences were found in the proportion of emotion lemmas used between the groups F (3, 86) = 3.654, p = 0.016. Once more, Bonferroni post hoc analyses revealed a difference in the use of emotion lemmas between the immersion learners (M = 6.87) and the Arabic monolinguals (M = 5.76) as well as between the immersion learners and the FL learners CEFR B (M = 5.90) $p < 0.05$ and $p < 0.05$ respectively.

The latter part of Hypothesis 1 states no differences between the Arabic monolinguals and the Arabic speaking L2 learners of English. This hypothesis was rejected, because even though no differences were found in the length of the narratives, differences were found in the use of Arabic emotion words, namely differences between the immersion learners and the Arabic monolinguals as well as the FL learners CEFR B in the proportion of emotion lemmas and emotion word tokens used to describe the Arabic *excitement* clips.

To test whether such differences or lack of are due to a crosslinguistic influence, the following analyses partly tests Hypothesis 2 focusing on the proportion of emotion words used, which states that there will be an L1 Arabic influence on the L2 English descriptions of emotions, but no influence of the L2 English on the L1 Arabic descriptions of emotions in both the immersion and non-immersion learners' data.

As explained in the *excitement* chapter, differences in the proportion of emotion word use between the two languages need to be compared. First of all, narratives must be compared in terms of length to determine whether or not the increased use of emotion words is due to the increase in narrative length. Therefore, the proportion of word tokens

and the proportion of emotion words used by the English native speakers and those by the Arabic monolinguals were compared first using independent sample t-tests to identify whether differences exist between the control groups. For the proportion of word tokens used in the narratives, significant differences were found between the English and the Arabic control groups whereby the English native speakers produced longer narratives than the Arabic monolinguals t (30) = -5.977, $p < 0.001$ (equal variances assumed) (M = 262.53 vs. M = 148.23). Further independent sample t-tests revealed significant differences between the proportion of emotion lemmas and the proportion of emotion word tokens between the Arabic and the English control groups t (19.77) = -5.737, $p <$ 0.001 (equal variances not assumed), and t (30) = -5.332, $p < 0.001$ (equal variances assumed) respectively, whereby the English native speakers used a higher number of emotion lemmas (M = 9.40 vs. M = 5.76) and emotion word tokens (M = 10.26 vs. M = 6.47) than the Arabic monolinguals.

A series of two-way ANOVAs (General Linear Model) were run to investigate whether the focus groups (immersion learners, FL learners CEFR C, FL learners CEFR B) differed in their emotion word use between their English and Arabic data. The between group variable in the two-way ANOVA was the context of learning/proficiency, in other words the three focus groups, while the language was the within group variable comparing English and Arabic. The series of two-way ANOVAs tested the proportion of narrative word tokens, the proportion of emotion lemmas, and the proportion of emotion tokens as dependent variables.

When running the tests for narrative length, the main effect for context of learning/proficiency was significant F (2, 70) = 4.73, $p = 0.012$, indicating there were significant differences among the tested groups. The immersion learners' narratives (M = 201.63, SD = 62.15) were significantly longer than the FL learners' CEFR B narratives (M = 153.00, SD = 47.00), $p = 0.009$. No significant differences were found between the

immersion learners and the FL learners CEFR C, or between the FL learners CEFR C and the FL learners CEFR B. The main effect for language was significant F (1, 70) = 227.63, $p < 0.001$, indicating there were significant differences between the length of the English ($M = 222.66$, $SD = 55.67$) and the Arabic narratives ($M = 154.68$, $SD = 40.14$). Furthermore, the interaction effect between the language of the narratives and context of learning/proficiency was significant F (2, 70) = 4.52, $p = 0.014$, indicating differences among the length of the English and Arabic narratives between the tested groups where the English narratives were longer than the Arabic narratives. To explain these differences, in the immersion learners' data, the English narratives ($M = 239.87$, $SD = 57.26$) were significantly longer than the Arabic narratives ($M = 163.39$, $SD = 39.40$), $p < 0.001$. In the FL learners' CEFR C data, the English narratives ($M = 221.03$, $SD = 48.23$) were significantly longer than the Arabic narratives ($M = 153.50$, $SD = 39.81$), $p < 0.001$. In the FL learners' CEFR B data, the English narratives ($M = 174.50$, $SD = 47.38$) were significantly longer than the Arabic narratives ($M = 131.50$, $SD = 37.30$), $p < 0.001$. Further differences were also found between the immersion learners and the FL learners CEFR C against the FL learners CEFR B in the English narratives, the immersion learners ($M = 239.87$, $SD = 57.26$) and the FL learners CEFR C ($M = 221.03$, $SD = 48.23$) used a significantly higher number of English word tokens than the FL learners CEFR B ($M = 174.50$, $SD = 47.38$), $p < 0.001$ and $p = 0.040$ respectively. No significant differences were found between the FL learners CEFR C and the FL learners CEFR B. Furthermore, no differences were found in the Arabic narratives between the groups.

For the proportion of emotion lemmas, the main effect for context of learning/proficiency was significant F (2, 70) = 3.99, $p = 0.023$, indicating there were significant differences among the tested groups. The immersion learners' use of emotion lemmas ($M = 7.37$, $SD = 1.80$) was significantly higher than the FL learners' CEFR B use of emotion lemmas ($M = 6.10$, $SD = 0.97$), $p = 0.026$. No significant differences

were found between the immersion learners and the FL learners CEFR C, and no significant differences were found between the FL learners CEFR C and the FL learners CEFR B. The main effect for language was significant F (1, 70) = 5.79, $p = 0.019$, indicating there were significant differences between the English and the Arabic emotion lemmas, the use of English emotion lemmas ($M = 7.22$, $SD = 1.73$) was higher than the use of Arabic emotion lemmas ($M = 6.68$, $SD = 1.38$). However, the interaction effect between language (English, Arabic) and context of learning/proficiency was not significant F (2, 70) = 2.50, $p = 0.090$, indicating that the groups used similar values of emotion lemmas between English and Arabic.

Furthermore, when comparing the proportion of emotion word tokens, the main effect for context of learning/proficiency was significant F (2, 70) = 5.92, $p = 0.004$, indicating there were significant differences among the tested groups. The immersion learners ($M = 8.32$, $SD = 1.98$) significantly used more emotion word tokens than the FL learners CEFR B ($M = 6.60$, $SD = 1.27$), $p = 0.007$. No significant differences were found between the immersion learners and the FL learners CEFR C, and no significant differences were found between the FL learners CEFR C and the FL learners CEFR B. The main effect for the language of the emotion word tokens was not significant F (1, 70) = 1.14, $p = 0.290$, indicating the values of the English and the Arabic emotion word tokens were all similar. Additionally, the interaction effect between the language of the emotion word tokens and the context of learning/proficiency was not significant F (2, 70) = 0.25, $p = 0.780$, indicating that the groups used similar values of emotion word tokens in English and Arabic.

The immersion learners used more emotion words and had longer narratives than the foreign language learners, as previously explained in the *excitement* chapter, this can be taken as a sign of successful foreign language learning and grasp of the FL English language, which is due to the context of learning. To summarize results from the

frustration narratives in terms of crosslinguistic influence, there were differences in the use of Arabic and English emotion lemmas and emotion word tokens. Statistical analyses revealed differences in the use of emotion lemmas and emotion word tokens between the Arabic and English control groups. Furthermore, differences were also found in the use of Arabic and English emotion lemmas in the immersion learners' and the FL learners' narratives. Although differences were found between the immersion learners and the Arabic monolinguals in the use of L1 emotion lemmas, differences were also detected between the English native speakers and the immersion learners in the use of L2 emotion lemmas despite the immersion learners' increased use of L2 emotion lemmas. Since differences were detected between the English native speakers and the immersion learners, there is no certainty that the differences found between the immersion learners and the rest of the Arabic speaking groups is due to CLI, namely an effect of the L2 on the L1. Furthermore, as for the use of emotion word tokens, even though differences were found between the immersion learners and the Arabic monolinguals as well as the FL learners CEFR B and no differences were found between the immersion learners and the English native speakers, no differences were found between the immersion learners and the FL learners in their English data either. Additionally, there was no effect of language on the use of emotion word tokens in the analysis between the focus groups. Furthermore, since this result was not reflected in the *excitement* narratives, CLI effects on the use of emotion lemmas and emotion word tokens cannot be assumed, as the results from the *frustration* narratives might be an isolated experience. In sum, there was no systematic pattern that emerged from the data in terms of similarities within the groups, differences between the groups, or any crosslinguistic performance congruity in the form of L2 influence on the L1, or L1 influence on the L2 on the length of the narratives and richness and diversity in emotion word use. Therefore, there is no crosslinguistic influence to be found when it comes to the variety and richness of the

emotion vocabulary, rejecting Hypothesis 2 on the proportion of emotion words used in the narratives.

6.2.2: Factors that affect the use of L2 English emotion vocabulary

One of the research questions revolves around attempting to discover the factors that aid the learning, understanding, and use of emotion vocabulary in the second language. The previous tables and tests compared the schooling contexts and proficiency by comparing the different groups which resulted in evidence of a group affect of these variables on the use of emotion words in the narratives and on the length of the narratives. However, there may be other variables or factors such as further tests on English language proficiency, age of acquisition of English, the frequency of use of English, gender, and language dominance that might have affected the use of emotion vocabulary in the narratives. Although the research question looks at the variables or factors in the use of the target emotion words, this part of the analyses provides further insight on the effect of these factors in the use of emotion words in terms of richness and diversity. Hypothesis 3 states that English proficiency, the context of learning of English, the frequency of use of English, and the age of acquisition of English will facilitate the identification and use of the emotion word *frustration*, and this part of the analyses partly tests this hypothesis in terms of emotion word use in English.

For English language proficiency, participants with proficiency CEFR C were compared with the participants with proficiency rating CEFR B regardless of their learning context on the 3 dependent variables: the proportion of emotion lemmas, the proportion of emotion word tokens, and the proportion of total word tokens. Independent sample t-tests found no differences in their use of emotion lemmas $p > 0.05$. However, t-test results revealed significant differences between the two proficiency groups in the proportion of emotion word tokens $t(15.33) = -2.481$, $p = 0.025$ (equal variances not

assumed). Moreover, significant differences were also found in the length of their narratives t (71) = -3.118, p = 0.003 (equal variances assumed).

Even though statistical significance was not found in the proportion of emotion lemmas in the L2, significance was found in the proportion of emotion word tokens, indicating that proficiency alone may not be enough when it comes to the learning and use of emotion vocabulary in the foreign language classroom, and that according to the tests run on the context of learning, it only reiterates the importance of how and in what context the foreign language is learned.

A Pearson correlation test was conducted to measure whether or not the age of acquisition of English played a part in the lexical diversity of the narratives and the emotion vocabulary. The age of acquisition ranged from age 4 to 8 years old, so the independent variable was the age which had 5 levels: 4, 5, 6, 7, and 8. There were no significant correlation to be found in the length of the narratives $p > 0.05$. Nevertheless, a small correlation was found in the proportion of emotion lemmas r = -0.258, p = 0.028. Moreover, a small correlation was found in the proportion of emotion tokens r = -0.280, p = 0.016.

The same test was conducted to measure whether or not the frequency of use of the English language affected their lexical diversity, which ranged from 2 to 5 on the given Likert scale on their questionnaires. Therefore the independent variable in this case had 4 levels: 2, 3, 4, and 5. The test revealed no significant differences in the proportion of emotion lemmas, the proportion of emotion word tokens, or in their narrative length i.e. the proportion of word tokens, $p > 0.05$, hence, the frequency with which they used their foreign language, i.e. English, did not affect their lexical diversity or their emotional vocabulary in the *frustration* narratives.

Furthermore, independent sample t-tests were conducted to test whether or not gender might have affected the richness of the narratives and on the use of emotion

vocabulary. There was no gender effect to be found on the richness of emotion vocabulary or on the length of the narratives in either the Arabic or the English corpora, $p > 0.05$.

Additionally, independent sample t-tests were run to compare language dominance, whether English or Arabic, against the use of emotion vocabulary and the length of the narratives. Results revealed that language dominance had an affect on the proportion of emotion lemmas and the proportion of emotion word tokens t (71) = -2.484, $p = 0.015$ (equal variances assumed) and t (71) = -2.148, $p = 0.035$ (equal variances assumed) respectively, in which those who claimed to be dominant in English $N = 27$ used more emotion lemmas ($M = 7.85$ vs. $M = 6.84$) and more emotion word tokens ($M = 8.40$ vs. $M = 7.47$) than those who are dominant in Arabic $N = 46$. Language dominance, however, did not seem to affect the productivity of the narratives, $p > 0.05$.

Results revealed that L2 proficiency had an effect on the use of emotion word tokens and on the length of the narratives but not on the use of emotion lemmas, suggesting the importance of context of learning of the L2 on the use of emotion vocabulary in the English narratives since effects of the context of learning were found in the two-way ANOVAS conducted in the previous section. Furthermore, age of acquisition of English played a small part in the use of emotion lemmas and emotion word tokens, whereby the younger the participants were exposed to English, the more this has increased the richness and diversity of their emotion vocabulary. There were no effects of the frequency of use of English, or gender on the use of emotion vocabulary in the narratives or the length of the narratives. Results, however, revealed that language dominance had an effect on the use of emotion lemmas and emotion word tokens. Hypothesis 3 is accepted for context of learning, age of acquisition, and language dominance, and is rejected for the rest of the factors tested in this analyses when testing the factors that affect the richness and variety of L2 emotion word use. Nevertheless,

because the *excitement* data did not reflect such results, there might not be a direct effect of age of acquisition or language dominance on the size and richness of emotion vocabulary in the narratives.

As suggested from the results on the use of emotion vocabulary in the narratives, there is no crosslinguistic influence to be found in the richness of the narratives or in the size of emotion vocabulary. Nonetheless, there might be a crosslinguistic influence on the use of the target emotion word *frustration*.

6.2.3: Target word use – *frustration*

This section will focus the analyses on the similarities and differences that may be found between the groups in the use of the target emotion word *frustration*. The following analysis tests Hypothesis 1, which states that no differences will be found between the immersion learners' use of L2 English emotion words and the emotion words used by the English native speakers. Meanwhile, the non-immersion learners' English answers will differ slightly from the English native speakers. This analysis will test the hypothesis with focus on the differences on the use of the target emotion word *frustration.*

All instances of the use of the word *frustration* in any of its derivatives whether *frustrated*, *frustrating*, or *frustration* were counted. Table 6.3 summarizes the frequency of the use of the target word *frustration* (and all other derivations) across the native English speakers, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B. The table indicates the number of participants who used the target emotion word in each clip.

Table 6.3: Frequency of the use of the target emotion word *frustration* between the participants indicating the speakers who used the target word against the total number of participants and the percentage of use:

Clip	*N* of participants/*N* of English native speakers (percentage)	*N* of participants/*N* of Immersion learners (percentage)	*N* of participants/*N* of FL CEFR C (percentage)	*N* of participants/*N* of FL CEFR B (percentage)
Clip 1	15/15 (100%)	30/31 (96.7%)	10/32 (31.2%)	2/10 (20%)
Clip 2	15/15 (100%)	24/31 (77.4%)	7/32 (21.8%)	0/10 (00%)
Clip 3	13/15 (86.6%)	20/31 (64.5%)	22/32 (68.7%)	1/10 (10%)
Clip 4	15/15 (100%)	31/31 (100%)	19/32 (59.3%)	2/10 (20%)
Clip 5	15/15 (100%)	25/31 (80.6%)	6/32 (18.7%)	0/10 (00%)

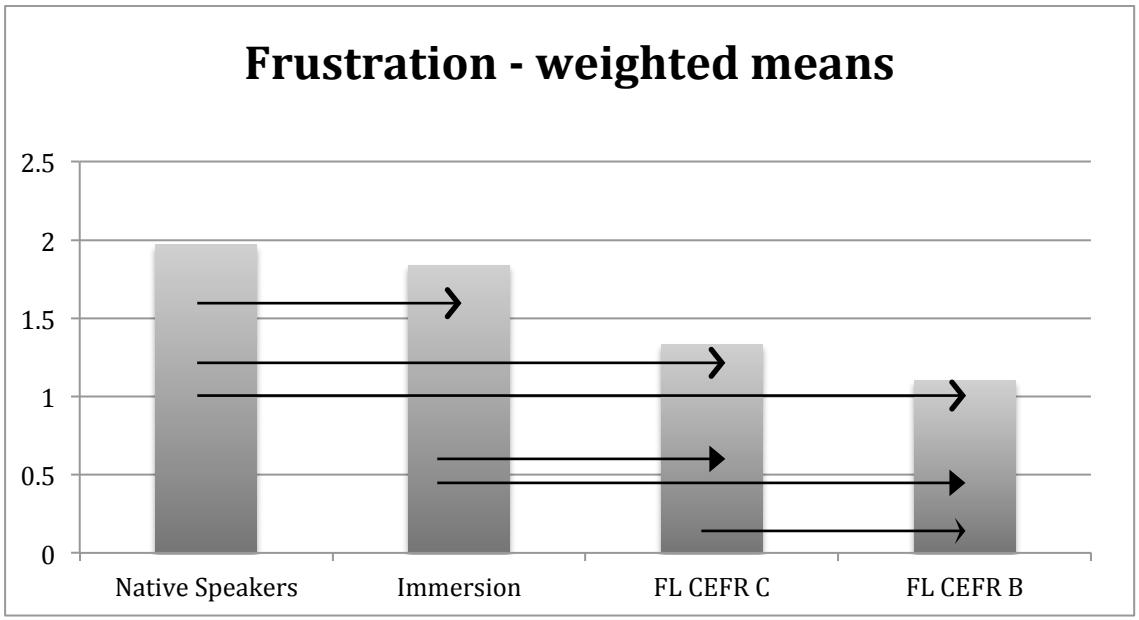
The table shows that all of the native speakers of English used the word *frustration* in their narratives in all of the five clips. Evident from the presented comparisons, the use of *frustration* is predominant amongst the English native speakers. The use of *frustration* was also more likely to occur with those in the immersion context of learning and with those of higher English language proficiency.

In order to further explain and understand the use of the target word *frustration,* Table 6.4 summarizes the combined total of all the clips along with the weighted means for each tested group. As explained in the previous chapter, the weighted mean is calculated instead of the arithmetic mean because the use of the target emotion word does not equal not using it; therefore, the use of emotion word is given more weight in the calculation.

Table 6.4: Combined total of use of target emotion word *frustration* indicating the sum, percentage of total sum, and weighted mean:

Context of Learning/Proficiency		Use of target emotion word	No use of target emotion word
Native Speakers of English *N* = 15	Sum	73	2
	% of Total Sum	97.33%	2.67%
	Weighted Mean	1.97	
Immersion Learners *N* = 31	Sum	130	25
	% of Total Sum	83.87%	16.13%
	Weighted Mean	1.84	
FL Learners CEFR C *N* = 32	Sum	53	107
	% of Total Sum	33.13%	66.88%
	Weighted Mean	1.33	
FL Learners CEFR B *N* = 10	Sum	5	45
	% of Total Sum	10%	90%
	Weighted Mean	1.10	

Figure 6.1: The weighted means of the use of the target emotion word *frustration* across all groups namely: Native speakers of English, Immersion learners, FL learners CEFR C, and FL learners CEFR B:



The arrows indicate where statistical differences are between the groups.

From the percentages and weighted means presented in the tables, and as evident from Figure 6.1 showing the weighted means of the use of the target emotion word *frustration*, the native speakers of English used the target emotion word the most, followed by the immersion learners, who were then followed by the FL learners CEFR C, and then the FL learners CEFR B. Therefore, statistical tests were required to test whether significant differences existed between the groups in the use of the target emotion word *frustration*.

One-way ANOVAs were conducted to test whether or not differences exist between the different groups of participants from different learning contexts/proficiencies (independent variable) namely the native speakers of English, the immersion learners, the FL learners CEFR C, and the FL learners CEFR B in their use of the target emotion word, in other words the total number of times the word *frustration* was used (dependent variable). Significant differences were found between the groups in the use of the target word *frustration* in the clips $F(3, 87) = 119.971$, $p < 0.001$. Bonferroni post hoc analysis revealed significant differences between all of the tested groups with one another $p < 0.001$, with lesser significance between the English native speakers and the immersion learners $p = 0.040$. From the analyses, Hypothesis 1 is rejected since differences were found between the immersion learners and the English native speakers on the use of the word *frustration*, and significant differences were also found between the FL learners and the English native speakers.

6.2.4: Factors that might have affected the use of the target word *frustration*

As for the variables that might have affected the use of the target emotion word *frustration*, the influence of English language proficiency, age of acquisition of English, age of acquisition of *frustration*, frequency of use of English, frequency of use of *frustration*, gender, and language dominance were tested. This part of the analyses further tests Hypothesis 3, which states that English proficiency, the context of learning

of English, the frequency of use of English, and the age of acquisition of English will facilitate the identification and use of the emotion word *frustration*.

First, statistical tests were run to measure how different levels of English language proficiency play a part in the use of the target emotion word *frustration*. The two different proficiency groups CEFR C and CEFR B were compared in their use of the word *frustration*. Independent sample t-tests revealed a difference between the two proficiency groups $t(25) = -8.230$, $p < 0.001$ (equal variances not assumed). Therefore, it can be inferred that English language proficiency does indeed play an important part in the target word use of *frustration*.

As for the age of acquisition of English, it was measured using a Pearson correlation test. The age of acquisition of English ranged between 4 and 8 from the given Likert scale of 1 to 5 on the questionnaire. The independent variable, the age of acquisition, had 5 levels: 4, 5, 6, 7, and 8. There was a moderate correlation between the different age groups in the use of the target emotion word *frustration* $r = -0.466$, $p < 0.001$.

As for the age of acquisition of the word *frustration* and how early exposure to this word might have facilitated its understanding and use, a Pearson correlation test was used to measure the use of the target word between the ages 11 and 16 (most frequent ages were 12 and 13). The independent variable in this case had 6 levels: ages 11, 12, 13, 14, 15, and 16. These age groups were taken from the participants' interview answers inquiring of their age of learning of *frustration* in school. Analysis on the emotion word *frustration* revealed strong correlation between the age of acquisition of the word *frustration* and the use of the target word $r = -0.744$, $p < 0.001$, the younger the participants were exposed to the word, the more likely they were to have understood it in context and used the emotion word *frustration*.

Furthermore, the frequency of use of English was inquired on a Likert scale of 1 to 5, 1 being the lowest, and 5 being the highest on the questionnaire. One-way ANOVA revealed statistical significance between the independent variable frequency of use of English and the target word *frustration* $F(3, 72) = 6.429$, $p = 0.001$. Bonferroni post hoc tests revealed that the more frequently the participants used their English, the more likely they would have used the word *frustration*.

As for the frequency of use of the word itself as inquired from the interview after the narratives, i.e. how frequently they use the word *frustration* in their daily lives. Significant differences were found in all five clips on scales ranging from 1 to 4 (the most used scales were scales 3 and 4), significant differences were also found $F(3, 72) = 17.266$, $p < 0.001$. Post hoc analyses revealed that the more frequently the participants used the word *frustration*, the more likely that they would have used it in their narratives. Therefore, the more frequently they used English and the more frequently they used the emotion word *frustration* in their daily lives played a role in its occurrence in their narratives.

As for the effect of gender on the use of *frustration,* independent sample t-tests revealed no gender differences on the use of the word *frustration* in the narratives $t(86) = -0.861$, $p = 0.391$ (equal variances assumed), suggesting that there was no gender effect on the use of the target emotion word.

Finally, independent sample t-tests revealed an effect of language dominance on the use of the target emotion word *frustration* $t(71) = -3.113$, $p = 0.003$ (equal variances assumed) whereby the more dominant the participants were in their English, the more likely that they would have used *frustration* in their narratives.

Results revealed the importance of the context of learning of English, English language proficiency, age of acquisition of English, age of acquisition of *frustration,* frequency of use of English, frequency of use of *frustration*, and English language

dominance in the use of the target emotion word *frustration* in the narratives. Having completed the quantitative statistical analysis, there remains a crucial question that needs to be addressed which is the possibility of a crosslinguistic influence in the English and the Arabic data, where the knowledge of one language influences the use of another, in which a closer look at the qualitative data may provide further insight, thus providing answers for Research Question 2, and further testing the respective Hypothesis.

6.3: Results from analyses utilising NVivo

As previously done with the *excitement* clips, this section first focuses on the emotion lexical choices used to describe the clips comparing the use of emotion words between English and Arabic between the immersion learners, the FL learners, and the speakers of the English and Arabic control groups providing possible answers for Research Question 1, and further answers for Research Question 2 regarding CLI effects. This is then followed by comparing the participants' use of expressions referring to any associated physiological reactions that may be linked to *frustration,* providing possible answers for Research Question 4. Afterwards, the analysis then looks at the interview comparing the participants' answers in defining the English emotion *frustration*, how they define the emotion internally and externally, comparing the English word *frustration* with what they view as its closest Kuwaiti equivalent(s) and comparing them against the emotion words used in their descriptions of the emotional state of the characters in the projected video clips, providing further clarifications for Research Question 2.

6.3.1: A comparison of the emotion words used to describe the *frustration* clips

To answer Research Question 1 regarding the differences in the learners' emotion lexical choices between the L1 and the L2 in comparison to the control groups this section provides answers from results on the *frustration* narratives. Firstly, all instances of the use of emotion words in the narratives and all its derivations regardless of their

plural or singular form, their morphosyntactic form, and gender state (in the Arabic cases) were counted as one. This section reports the use of emotion lemmas, combining the total of all emotion words used in all five clips. Table 6.5 summarizes the emotion lemmas used to describe the *frustration* clips in both the Arabic and English narratives ordering the most frequently used words to the third/fourth most frequent. Lists of the words used to describe the *frustration* clips and the number of their occurrences (tokens) can be found in appendix G2.

Table 6.5: The emotion lemmas used to describe the *frustration* clips in the Arabic and in the English narratives by order of frequency of use:

Context of Learning/ Proficiency	Arabic Emotion Words	Number of Lemmas	English Emotion Words	Number of Lemmas
English Native Speakers *N* = 15			*frustrated*	67 (48%)
			angry	28 (20%)
			upset	16 (11.5%)
			agitated	14 (10%)
			annoyed	7 (0.5%)
			disappointed	4 (3%)
			sad	3 (2%)
Immersion Learners *N* = 31	*mʿaṣṣib* (angry)	110 (52%)	*frustrated*	121 (53.5%)
	mitnarfiz (annoyed)	36 (17%)	*angry*	66 (29%)
	zaʿlān (sad)	30 (14%)	*sad*	20 (9%)
	mitḍāyiq (upset)	25 (12%)	*upset*	10 (4.5%)
	muḥbaṭ (disappointed - frustrated)	10 (5%)	*disappointed*	6 (2.5%)
			annoyed	2 (1%)
			agitated	1 (0.5%)
FL Learners CEFR C *N* = 32	*mʿaṣṣib* (angry)	111(51.5%)	*angry*	103 (47%)
	zaʿlān (sad)	32 (15%)	*frustrated*	54 (25%)
	mitnarfiz (annoyed)	26 (12%)	*sad*	28 (13%)
	mitḍāyiq (upset)	24 (11%)	*upset*	10 (4.5%)
	muḥbaṭ (disappointed - frustrated)	10 (4.5%)	*disappointed*	10 (4.5%)
	yāʾis (despair)	10 (4.5%)	*depressed*	7 (3%)
	xāb ʾamala (disappointed)	3 (1.5%)	*annoyed*	6 (2%)
FL Learners CEFR B *N* = 10	*mʿaṣṣib* (angry)	33 (55%)	*angry*	38 (60%)
	zaʿlān (sad)	10 (16.5%)		
	mitnarfiz (annoyed)	6 (10%)	*sad*	11 (17%)
	mitḍāyiq (upset)	5 (8%)	*frustrated*	5 (8%)
	yāʾis (despair)	3 (5%)	*upset*	3 (5%)
	muḥbaṭ (disappointed - frustrated)	2 (3%)	*depressed*	3 (5%)
	miktiʾib (depressed)	1 (1.5%)	*disappointed*	3 (5%)
Arabic Monolinguals *N* = 17	*mʿaṣṣib* (angry)	55 (57%)		
	mitḍāyiq (upset)	13 (13.5%)		
	yāʾis (despair)	10 (10.5%)		
	zaʿlān (sad)	8 (8.5%)		
	mitnarfiz (annoyed)	6 (6.25%)		
	muḥbaṭ (disappointed - frustrated)	4 (4.25%)		

The results from the table are analysed and the differences between the groups are compared to provide insight to Research Question 2 on CLI. In the case of the emotion word *frustration,* there is no equivalent to this emotion word in Kuwaiti Arabic, as the closest available translation equivalent is *ʾiḥbāṭ* (disappointment - frustration) a borrowed word from MSA, which does not carry the same conceptualization, physiological reactions, or the same emotional weight as *frustration*. Participants seemed to agree that most of the clips depicted the emotion of *anger* evident in their use of *mʿaṣṣib* (angry), apart from clip 3 (girl with balloon) in which they all agreed on the girl being *zaʿlān* (sad). An interesting observation is in their use of the emotion word *muḥbaṭ* (disappointed - frustrated) as it not only varied from group to group, but also from clip to clip suggesting a stimuli effect where it was mostly used to describe the girl in clip 3, which was also the clip where they mostly saw her as *zaʿlān* (sad). Therefore, it was important to understand what they meant by their use of *muḥbaṭ* (disappointed - frustrated) in their descriptions using the interview as a supplement to the narratives.

Another notable observation is that the immersion learners did not use words that depict the feelings of *depression* and *despair* as much as the participants from the other Arabic speaking groups in both the English and the Arabic narratives. Most immersion learners seemed to have mostly used words that fall under the categories of *anger* and *irritation* especially in clips 3 (girl with balloon) and 4 (boy wearing shirt). In other words, the intensity or weight of the emotions used in their narratives differed when compared to the rest of the focus groups. To further explain, in clips 3 and 4 where the immersion learners would use words that fall into the categories of *anger*, *tension*, *agitation*, and *sadness*, participants in the other Arabic speaking groups would use words like *sadness*, *despair,* and *depression*. We see that the immersion learners did not use words that would indicate such *despair* and *depression*. Looking closely at the English narratives, the immersion learners closely resembled the performance of the English

native speakers where they predominantly described the characters in all of the clips as *frustrated*, and this is also reflected in their Arabic data where *mʿaṣṣib* (angry) and *mitnarfiz* (annoyed) were used. This can be explained by the fact that there is no equivalent to *frustration* in Kuwaiti Arabic, and the closest and most frequently used words may be *mʿaṣṣib* (angry) and *mitnarfiz* (annoyed) as opposed to *muḥbaṭ* (disappointed - frustrated).

Meanwhile, both the FL learners CEFR C and the FL learners CEFR B described the characters' emotions as *angry* in clips 1 (lost item), 2 (computer man), and 5 (shower prank), and *sad* in clip 3 (girl with balloon). They only differed in clip 4 (boy wearing shirt) where the FL learners CEFR C used both *frustrated* and *angry* in their narratives. Their choices will be further explained with further analysis of the qualitative data as well as data from the interview where the immersion learners explain their use of *mʿaṣṣib* (angry), and the FL learners CEFR C and FL learners CEFR B explain what they meant by their use of *frustration*, since they seem to have mostly used it in clips 3 and 4, which is parallel to their use of *muḥbaṭ* (disappointed - frustrated) in their Arabic narratives.

Other than the fact that the immersion learners resembled the native speakers of English in their use of *frustration*, and the observation that was found in the Arabic data in the increased use of words that fall into the categories of *sadness* and *depression* amongst the FL learners CEFR C and FL learners CEFR B in clips 3 (girl with balloon) and 4 (boy wearing shirt) which may be influenced by their L1, there is another observation that is also noteworthy. The immersion learners used words like *upset* and *sad* in clips 1 (lost item) and 5 (shower prank) for example when the native speakers of English did not. However, rather than assuming L1 Arabic influence on the L2 English, it may be due to the fact that the immersion learners were almost double the number of participants in the native speakers group, which may have provided more chances of variety and diversity of the emotion words used in the narratives since such emotion

words were used in other clips. Further to note, the differences in the use of *frustration* in clips 3 and 4 are of need of further analysis. The reason is because the FL learners CEFR C used the emotion word *frustration* the most in their narratives of clips 3 and 4, and the same applies to participants from the FL learners CEFR B where they mostly used *frustration* in their narratives of clip 4.

6.3.2: Framing of emotional scripts in *frustration* clips 3 and 4

It was noted that the most used instances of *frustration* amongst the participants in English and Arabic (*muḥbaṭ*) were in clip 3 (the little girl who was trying to reach the balloon) and in clip 4 (the little boy who was trying to dress himself). Further readings and comparisons revealed a pattern in the use of *frustration* when compared with other emotion words in the descriptions of the emotional state of the characters of each clip. This pattern of use of *frustration* as an emotion word and emotional state differed between the different groups.

First of all, in clip 3 (girl with balloon) the way the little girl's emotional state was framed by the native speakers of English and the immersion learners differed from how it was framed by the FL learners CEFR C and the FL learners CEFR B. The English native speakers and immersion learners indicated that she was *frustrated* first at her many unsuccessful attempts, and then became *sad*, *upset*, or *disappointed* at the end, whereas the latter groups saw that she was first *depressed*, *disappointed*, and *sad*, and ended up feeling *down* and *frustrated* towards the end. Table 6.6 illustrates the difference in the use and placement of the word *frustration* in clip 3 between the tested groups.

Table 6.6: The differences in the use and placement of the emotion word *frustration* in the English narratives in clip 3 amongst the English native speakers, immersion learners, FL learners CEFR C, and FL learners CEFR B:

Framing of Emotional Scripts	sad - frustrated	disappointed - frustrated	disappointed - down & frustrated	depressed - frustrated	frustrated - disappointed	frustrated - upset	frustrated - sad
N of Native Speakers					1	4	1
N of Immersion Learners					1		4
N of FL learners CEFR C	4	1	1	1			2
N of FL learners CEFR B	1						

Data in clip 4 (boy wearing shirt) also mimics the case in clip 3 whereby the word *frustration* was mainly used as an end state to feeling *angry* and was usually coupled with *sad* or *depressed* among some of the FL learners. Table 6.7 illustrates the differences in the use and placement of the word *frustration* in clip 4 between the tested groups.

Table 6.7: The differences in the use and placement of the emotion word *frustration* in the English narratives in clip 4 amongst the English native speakers, immersion learners, FL learners CEFR C, and FL learners CEFR B:

Framing of Emotional Scripts	angry - sad & frustrated	angry - frustrated & depressed	angry - frustrated	frustrated - angry	frustrated - disappointed	frustrated - upset	frustrated - sad	frustrated - angry & sad
N of Native Speakers				1		2		3
N of Immersion Learners			1	5	1		2	3
N of FL learners CEFR C	1	2	5	1		1		
N of FL learners CEFR B	2	1						

Notably, both the English native speakers and the immersion learners differed in their framing of the emotional experience of the boy's dilemma at trying to put his shirt

on by himself from the FL learners CEFR C and FL learners CEFR B. The English native speakers along with the immersion learners agreed on *frustration* being the emotion the boy felt while he was attempting to put his shirt on and that the end state was when the boy was feeling *sad* and *upset* as well as *angry* as opposed to the FL learners CEFR C and FL learners CEFR B who saw the opposite. Their use of *frustration* being the end state of the emotional experience perhaps can be explained by their use of the Arabic *muḥbaṭ* (disappointed - frustrated) in which the Arabic data mimics what was found in the English data, whereby *frustration* in this case was seen as feeling *down, depressed* and *disappointed* as well as being a state of *hopelessness* rather than a feeling of *tension* and *agitation*. The emotion of *muḥbaṭ* (disappointed - frustrated) in Arabic is usually an end state in line with feeling *down* and *depressed*, where the idea of giving up into *sadness* overcomes the person after feeling *angry* and *disappointed* at an obstructed goal. This can be taken as a possible evidence of an L1 influence on the L2 affecting the FL learners CEFR C and FL learners CEFR B in their use of *frustration* and other emotion words that fall into the categories of *hopelessness* and *despair* in their English narratives. There is also the possibility of an L2 influence on the L1 in the case of the immersion learners whereby their use of *frustration* is different from the meaning behind the Arabic equivalent *muḥbaṭ* (disappointed - frustrated).

6.3.3: Physiological references

In this section and as previously done in the *excitement* chapter, instances or references to a physiological reaction to the emotional context in the projected clips were noted and compared to test Research Question 4, which looks at the differences, if any, between the L2 learners' and the English native speakers in the L2 English observations and references to the display of the emotions in question, and the differences, if any, between the L2 learners' Arabic references and the references made by the Arabic monolinguals. Such references include physical states, gestures, facial expressions, etc.

As previously explained in Chapter 5, should the focus groups display a higher or lower attention to the facial and physical reactions which can be traced back to how the participants from the control groups pay more or less attention to the emotional physiological reactions associated with *frustration,* in addition to how the physiological reactions are interpreted and how the emotional experience is perceived between the groups, differences that can be attributed to the L1 or the L2 can be taken as a sign of a crosslinguistic influence, providing further answers to Research Question 2. The analysis compares the tendency of observations made by the control groups of the L1 and the L2 and compares that across the focus groups in their attention and use of specific physiological observations. For the clips narrated in Arabic, the references were translated into English for ease of reading and comparing. Instances where the main character(s) were visibly *hitting/breaking/throwing/kicking* an object or the source of his *'anger/frustration'* were not counted since they were noted by most participants and were quite obvious in the video clips. This comparison focuses on more specific observations made by the different participants.

In the Arabic data from clip 1 (lost item), a participant noted that the man '*felt tense*' (1 immersion learner), while others said that the person in the clip was '*tired*' (1 FL learner CEFR C, 1 FL learner CEFR B). In the English data, some participants noted that he was '*tense*' (2 native speakers of English, 3 immersion learners). Also, participants noted he was '*tired*' (1 FL learner CEFR C, 1 FL learner CEFR B).

As for the Arabic data from clip 2 (computer man), a number of participants said that he '*lost control of his feelings*' (4 immersion learners, 2 FL learners CEFR C, 2 FL learners CEFR B, 1 Arabic monolingual). No other observations were found other than the fact that the man was hitting/breaking his computer. As for the English data, participants noted that the man was '*aggressive*' (2 native speakers, 2 immersion learners, 1 FL learner CEFR C, 1 FL learner CEFR B), and '*violent*' (1 native speaker, 1

immersion learner, 1 FL learner CEFR B). Others said that the man was '*having a bad tantrum*' (1 immersion learner), '*threw a fit*' (1 immersion learner), '*blew up*' (1 native speaker, 2 immersion learners, 1 FL learner CEFR C), and '*reacted physically*' (2 native speakers, 1 immersion learner). Similarly, participants also said that '*he lost control/couldn't control himself/couldn't control his anger*' (1 native speaker, 4 immersion learners, 2 FL learners CEFR C, 1 FL learner CEFR B). There were others who also found that the man was '*tense*' (2 native speakers, 3 immersion learners).

For clip 3 (girl with balloon), many participants noted the girl was '*crying*' in the Arabic data (14 immersion learners, 20 FL learners CEFR C, 6 FL learners CEFR B, 11 Arabic monolinguals). A participant also noted that she '*lay down*' (1 Arabic monolingual). Another participant also noted her facial features and said that the '*feeling [sadness] showed on her face*' (1 FL learners CEFR B). Also, a participant noted that she '*put her head in her hands*' (1 Arabic monolingual), while others noted that she was '*tired*' (1 FL learner CEFR C, 3 FL learners CEFR B, 2 Arabic monolinguals). As for the English data, participants mostly made note of her '*crying*' (14 immersion learners, 16 FL learners CEFR C, 5 FL learners CEFR B), made note that she '*laid her head on the sofa*' (12 FL learners CEFR C, 4 FL learners CEFR B), and that she was '*tired*' (2 FL learners CEFR B).

In clip 4 (boy wearing shirt), participants from the Arabic narratives said that the boy '*expressed his anger*' (7 immersion learners, 4 FL learners CEFR C, 1 FL learner CEFR B, 3 Arabic monolinguals). Additionally, others also noted the boy '*crying*' (13 immersion learners, 12 FL learners CEFR C, 3 FL learners CEFR B, 9 Arabic monolinguals). Moreover, participants also noted that the boy '*lay down*' (1 FL learner CEFR C, 1 FL learner CEFR B), and others said he was '*tired*' (1 FL learner CEFR C, 2 FL learners CEFR B). Also, a participant noticed the boy's facial features and said that the boy's '*face was in a frown*' (1 immersion learner), while another also said he was

'*frowning*' (1 immersion learner). As for the English data, a participant said the boy was '*aggressive*' (1 native speaker), and another said that he started '*to get physical*' (1 native speaker). Moreover, participants said that '*he expressed his anger*' (2 immersion learners, 1 FL learner CEFR C), while another said that '*he lashed out*' (1 immersion learner). Others also said that he '*took out his frustration*' (2 immersion learners), and '*he took it [the feeling] out*' (4 native speakers, 3 immersion learners), and that he '*threw a tantrum*' (1 immersion learner, 1 FL learner CEFR C). The boy '*crying*' was also noted (4 native speakers, 13 immersion learners, 13 FL learners CEFR C, 4 FL learners CEFR B). Other participants also noticed that the boy's '*face was red*' (I native speaker, 1 immersion learner), and that he was '*frowning*' (1 native speaker, 3 immersion learners). A couple of participants also noted that the boy '*lay down on his bed*' (1 FL learner CEFR C, 1 FL learner CEFR B).

Lastly, Arabic data from clip 5 (shower prank) did not reveal other observations other than the boy hitting the showerhead. As for the English data, participants found the boy to be '*aggressive*' (1 immersion learner), that he was '*frantically trying*' (1 immersion learner), that he was '*washing vigorously*' (3 native speakers, 2 immersion learners), and that he '*lost his patience*' (1 FL learner CEFR C).

The *frustration* data, as opposed to the *excitement* data, included more physiological references in the narratives. But like the *excitement* data, the English narratives included more physiological references and observations than the Arabic. The immersion learners were also the ones who made note of the physiological reactions the most, while the Arabic monolinguals made the least physiological references. Moreover, there were no differences between the participants in their noting of the aggravated and agitated state of the characters in the clips. However, when describing the state of the little boy who was trying to put his shirt on in clip 4, the English native speakers and the immersion learners made note of his facial reactions in their observation of his

'*frowning*' and his '*red*' face. This observation was not made the by FL learners. Nevertheless, perhaps the most notable observation was the use of the word '*tired'* that occurred in clips 1 (lost item), 3 (girl with balloon), and 4 (boy wearing shirt) by the FL learners CEFR C, the FL learners CEFR B, and the Arabic monolinguals. When inspecting the use of 'tired' along with the use of 'laying down' and 'crying', it was usually linked with their use of the English word *frustration* as well as *muḥbaṭ* (disappointed - frustrated) in their Arabic narratives, especially amongst the FL learners CEFR C and FL learners CEFR B. These physical aspects were not noted by the native speakers of English or by the immersion learners, in fact, none of native speakers of English noted or mentioned the girl *crying* in clip 3. Therefore, the use of words like 'tired', 'laying down', and 'crying' in the FL learners' narratives and physiological observations, might be interpreted as a form of L1 influence on the L2 because the conceptualization of the emotion in the L1 differs from how it is conceptualized in the L2.

Nevertheless, this observation was in need of further support whereby their definitions of the English *frustration* as well as the Arabic *muḥbaṭ* (disappointed - frustrated) were needed to further understand their use of such emotion words in their descriptions and their physiological references to the emotion. Therefore, adding the interview was essential to this research as it provides clarification of the participants' emotion lexical choices and other observations in their narratives as well as providing possible support for any crosslinguistic influence that may be evident in the data.

6.3.4: Interview analysis

Adding the interview was essentially needed to explain the choice of the emotion words and their meanings when used in the emotional descriptions in the narratives, and provide further insight on how the participants define and use *frustration*. Interview data revealed quite a few explanations that add to the findings from the narrative analyses.

Similarly to the analysis of the interview on the emotion word *excitement,* this interview inquired about the definition of the emotion word *frustration*. The participants were to describe what the emotion entails internally and explain how they feel mentally, how the emotion feels physically and how it is felt in the body. They were also asked to give the Arabic translation(s) of the word, and compare the perceived Arabic equivalent(s) to the English in terms of emotional weight.

6.3.4.1: Defining the target emotion word *frustration*

When asked to define *frustration*, it was defined as the feeling that overcomes someone when one's goal is obstructed or when one is unable to accomplish something and when things get in the way, and it is an accumulation of *anger*, *disappointment*, and *sadness*. It was also defined as feeling down and pessimistic. The definitions given included at least one or more of these categories as what makes up the feeling of *frustration*. The native speakers of English predominantly defined *frustration* as 'the feeling that takes place in the obstruction of a goal' 78.6%, while other answers included 'the feeling that comes when things get in the way and when they can't accomplish something' 14.3%, and 'a feeling that is an accumulation of anger, disappointment, and sadness' 7.1%. Immersion leaners' answers defined *frustration* as 'the emotion they feel when they can't accomplish something' 57%, or 'when a goal gets obstructed' 43%. As for the FL learners CEFR C, they defined *frustration* as 'the feeling they get when they can't accomplish something' 81%, or 'when they can't reach their goal' 9.5%, 'feeling down' 4.7%, and 'feeling pessimistic' 4.7%. All of the FL learners CEFR B agreed on defining *frustration* as 'the feeling they get when not being able to accomplish something or when something gets in the way of their target' 100%.

Apart from the FL learners CEFR C including feeling down and pessimistic in their definitions, most participants from all groups agreed on *frustration* being a feeling that comes from an obstruction of a goal. Therefore, the reason behind the emotion of

frustration is agreed on and definitions are compatible. However, the emotion word *muḥbaṭ* (disappointed - frustrated) can also be defined using the same definitions given for *frustration,* and this perhaps might explain the definitions using 'feeling down' and 'pessimistic'. Hence, further clarification was needed on how it feels to be *frustrated*.

6.3.4.2: Feelings associated with *frustration*

Participants were then to describe how it was to feel *frustrated*, in other words what *frustration* entails mentally and emotionally. Native speakers of English answers on feeling *frustrated* included: feeling 'angry, upset, and sad' 21%, 'angry' 14%, 'agitated' 14%, 'annoyed' 12%, 'confused' 12%, 'irritated' 9%, 'hopeless' 9%, 'stressed' 5%, 'disappointed' 2%, and 'sad' 2%. Immersion learners defined the feeling of *frustration* as 'a mix of anger and sadness' 39%, and also 'feeling disappointed' 23%, 'annoyed' 15%, 'upset' 5%, 'having negative thoughts' 2%, 'feeling irritated' 2%, 'hopeless' 2%, 'desperate' 2%, and 'confused' 2%. As for the FL learners CEFR C, they described being *frustrated* as 'being angry and sad' 19%, 'feeling sad and depressed' 17%, 'hopeless' 13%, 'sad' 11%, 'disappointed' 9%, 'angry' 9%, 'stressed' 9%, 'upset' 4%, 'having negative thoughts' 4%, 'feeling sick and tired' 2%, 'desperate' 2%, and 'irritated' 2%. As for the FL learners CEFR B, they defined *frustration* as feeling 'sad' 30%, 'angry and sad' 30%, 'sad and depressed' 20%, 'disappointed' 10%, and 'angry' 10%. Word clouds that visually show the most frequently used words in the participants' explanations of how it is to feel *frustrated* emotionally were generated using word frequency tests and can be found in appendix H3.

While there were minimal differences found in how different participants defined *frustration*, differences were found in the feelings different participants attach to feeling *frustrated.* The English native speakers and immersion learners mostly related *frustration* to feeling *angry*, *irritated*, *agitated*, *confused*, *hopeless*, and *sad*, and while *sadness* and *anger* were still mentioned by the FL learners CEFR C and FL learners CEFR B, they

related *frustration* to words that fall more into the category of *sadness* such as feeling *depressed* than words that entail *anger* and *irritation*. This was also reflected in the narratives whereby the participants, whether the immersion or the FL learners, used these respective words in their descriptions. The immersion learners' narratives mostly included words that fall under the categories of *anger*, *irritation*, and *sadness*, while the FL learners' narratives included a higher number of words that fall under the category of *sadness*. Since *frustration* and *muḥbaṭ* (disappointed - frustrated) can be differentiated by their different emotional and physiological reactions, participants were asked about their physical reactions to feeling *frustrated.*

6.3.4.3: Physiological aspects of *frustration*

Participants were also asked to describe how they physically feel to be *frustrated*; in other words, they were to describe what happens to their body when experiencing the emotion of *frustration*. The English native speakers mentioned 'tension' 39%, 'lots of movements' 16%, 'feeling hot all over like having a fire inside' 13%, 'having their heart pumping and feeling their pressure rising' 10%, 'feeling the urge to take it out on something' where a few even mentioned hit 10%, others have also mentioned 'interjections like *aaagh grrrr*' and clenching their fists and acting out the gesture while vocalizing 10%, and also 'turning red' 3%. As for the immersion learners, they mentioned 'tension' 29%, the 'need to hit or take it out on something' 20%, 'clenching the fists and wanting to yell out *aaagh*' 16%, 'having their heart pumping and feeling their pressure rising' 6%, 'sweating' 6%, 'moving a lot' 6%, 'adrenaline' 4%, 'turning red' 4%, 'frowning' 2% "*like your face just pulls in and you frown*", and 'burning inside' 2%. As for the FL learners CEFR C, they described their physical changes to include 'feeling down' 18%, 'having no energy' 16%, 'crying' 10%, 'feeling hot' 6%, 'wanting to hit' 6%, 'wanting to scream' 4%, 'turning red' 4%, 'sweating' 4%, 'adrenaline' 2%, 'breathing fast' 2%, 'feeling heavy' 2%, 'feeling tense' 2%, 'moving a lot' 2%, and

'being violent' 2%. As for the FL learners CEFR B, they described *frustration* to physiologically include feeling 'tired and exhausted' 38%, 'crying' 13%, 'feeling down' 13%, 'lack of energy' 13%, 'sweating' 6%, 'shouting and getting very loud' 6%, 'wanting to hit something' 6%, and 'feeling hot all over' 6%.

Word clouds that visually show the most frequently used words in the participants' explanations of how it was to feel *frustrated* physiologically were generated using word frequency tests and can be found in appendix H4.

Similarly to the emotional reactions participants attach to feeling *frustrated*, participants differed in the physiological reactions they attached to feeling *frustrated*. The English native speakers and the immersion learners explained that when they feel *frustrated* their reactions included feeling *tense* and feeling emotionally and physically energized and worked up evident in the clenching of the fists, grinding of the teeth, the vocal interjections, having lots of movements, the need to physically release their tension and agitation and perhaps take it out on something or someone, and also feeling hot, rapid heart beats, and feeling an increase in their blood pressure. Meanwhile, even though such reactions were found in some of the FL learners' answers, more so with those with proficiency rating CEFR C than those with proficiency rating CEFR B, most of their answers included *lack of energy*, feeling *down*, and feeling *tired*.

Participants seemed to understand the meaning of *frustration* as evident in their definitions of the word and the reasons that would result in feeling *frustrated*. However, when they came to describe the emotional and physiological aspects, differences were discovered between the native speakers of English and the immersion learners against some of the FL learners CEFR C and the FL learners CEFR B, whereby *frustration* for the latter groups means feeling *hopeless*, *tired*, *depressed*, *sad*, and having *no energy* as opposed to feeling *agitated*, *irritated*, *angry*, *tense*, and *worked up*. In other words, the English native speakers along with the immersion learners defined *frustration* as an

emotionally charged feeling that results from an obstructed goal, while the FL learners CEFR C along with the FL learners CEFR B defined it as an emotionally drained and subdued feeling that also results from an obstructed goal. This may be due to the fact that they associated *frustration* with the Arabic emotion word *muḥbaṭ* (disappointed - frustrated), in which *muḥbaṭ* (disappointed - frustrated) is more commonly associated with the physiological reactions that the FL learners CEFR C along with the FL learners CEFR B defined *frustration* with. These answers are also reflected in their narratives in their use of the English emotion word *frustration* and the Arabic emotion word *muḥbaṭ* (disappointed - frustrated), in their framing of the emotional state of the characters in clips 3 (girl with balloon) and 4 (boy wearing shirt), and in their references to the physiological reactions of the characters in the video clips. This following section will provide results from the interview where *frustration* was to be translated by the participants, adding further support to this argument.

6.3.4.4: Kuwaiti equivalent(s) of the English emotion word *frustration*

The interview also included discussing the meaning of *frustration* in Kuwaiti Arabic, as participants were asked for the closest translation equivalent. This is to further understand their use of *frustration* versus *muḥbaṭ* (disappointed - frustrated) in their narratives since they differ in how they are conceptualized in emotional weight and physiological reactions, which can provide possible evidence of CLI effects.

Immersion learners identified *frustration* to mean '*muḥbaṭ* (disappointed - frustrated) but added that it is the equivalent found in the dictionary' 26%, '*mʿaṣṣib* (angry)' 25%, and '*mitnarfiz* (annoyed) 23%'. Furthermore, 13% of the answers declared that 'they did not know what it means in Arabic', while other answers included '*mitḍāyiq* (upset)' 5%, 'a mix of feeling *mitnarfiz* (annoyed) and *mitḍāyiq* (upset)' 5%, and '*zaʿlān* (sad)' 3%. The FL learners CEFR C translated it as '*muḥbaṭ* (disappointed - frustrated)' 45%, '*mitḍāyiq* (upset)' 19%, '*mitnarfiz* (annoyed)' 13%, '*mʿaṣṣib* (angry)'

10%, '*mitnarfiz* (annoyed) and *mitḍāyiq* (upset)' 6%, and '*yāʾis* (despair)' 6%. As for the FL learners CEFR B, they translated *frustration* as '*muḥbaṭ* (disappointed - frustrated)' 60%, '*mitḍāyiq* (upset)' 20%, '*zaʿlān* (sad)' 10%, and '*yāʾis* (despair)' 10%.

The definitions given by the immersion learners correspond with how they defined the English emotion word *frustration*, in which they mostly translated it into emotion words that combine and/or translate to *anger*, *irritation*, and *sadness*. They have, however, mostly used the standardized dictionary translation word *muḥbaṭ* (disappointed - frustrated), but all those who paired *frustration* with such a translation explained that it was what was available as a dictionary entry. By adding such a statement, it may be explained that they felt this translation might not be accurate. Perhaps this also explains their heightened use of *mʿaṣṣib* (angry) in their narratives as opposed to *muḥbaṭ* (disappointed - frustrated). Immersion learners were not taught their foreign language (English) via the translation and dictionary methods, therefore, it was interesting to find them translating *frustration* into *muḥbaṭ* (disappointed - frustrated), not only as an MSA dictionary entry but also as a word that is rarely used in the Kuwaiti dialect whereby on a frequency Likert scale of 1 to 5 (1 being never, and 5 being always) the average frequency of use was M = 1.5 (N = 34). Additionally, the FL learners CEFR C have also translated *frustration* into emotion words that fall into the *anger*, *irritation*, and *sadness* categories. When compared to the immersion learners, they differed in how much *anger*, *irritation*, and *sadness* they attach to feeling *frustrated*. The immersion learners used more *anger* and *irritation*, and less *sadness*, while the FL learners CEFR C attached more *sadness* than the feelings of *anger* and *irritation*. Further to add to this observation is the translations given by the FL learners CEFR B whereby all of their translations fell under the category of *sadness*.

Furthermore, the immersion learners when translating *frustration* into *muḥbaṭ* (disappointed - frustrated) explained that it was the closest dictionary entry, but this

explanation was not evident in the FL learners' translations. Because of the difference in the emotional weight and meanings attached to these emotions between the English and the Arabic, participants were then further asked to explain why they gave such meanings and translation equivalents for the word *frustration*. They were asked whether they found the meanings they gave were equal to *frustration* in terms of emotional weight.

Since *muḥbaṭ* (disappointed - frustrated) was considered the closest equivalent to *frustration* by most participants, those who paired *frustration* with this translation were asked whether it matched *frustration* in emotional weight. 47% of the immersion learners agreed that '*frustration* had a much deeper meaning in English than *muḥbaṭ* (disappointed – frustrated) and is more emotionally charged and is described better in English than it is in Arabic'. Other immersion learners explained 'that *muḥbaṭ* (disappointed – frustrated) means *disappointment*' 23.5%, others also defined '*muḥbaṭ* (disappointed – frustrated) as feeling *sad* and *depressed*' 23.5%, and 6% explained 'that there is no word for *frustration* in Arabic that truly matches it, and *muḥbaṭ* (disappointed – frustrated) is the only available one given in most dictionaries'. Answers from the FL learners CEFR C included: 'yes they are equal' 43.7%, 'that there is no word for it in Arabic' 25%, 'that *muḥbaṭ* (disappointed – frustrated) is the closest Arabic meaning' 18.7%, 'that *muḥbaṭ* (disappointed – frustrated) means *disappointment*' 6.2%, and also that '*muḥbaṭ* (disappointed – frustrated) means '*sad* and *depressed*' 6.2%. Meanwhile, answers from the FL learners CEFR B included: 'yes they are the same' 83%, and 'that *frustration* is stronger' 17%.

The immersion learners clearly stated a difference between *frustration* and *muḥbaṭ* (disappointed – frustrated), and most have explained *frustration* to be more emotionally charged than *muḥbaṭ* (disappointed – frustrated), where the latter was translated as feeling *disappointed*, *sad*, and *depressed*. And while there were some FL learners that stated a difference between *frustration* and *muḥbaṭ* (disappointed –

frustrated), the majority of both the FL learners CEFR C and the FL learners CEFR B stated that they were equal or similar in meaning and emotional weight. Another interesting observation is that there were a number of immersion learners and FL learners CEFR C that stated that there was no Arabic equivalent to the English word *frustration.*

In addition, to understand the rest of the given Arabic translations of *frustration*, and more importantly explain the participants' use of *mʿaṣṣib* (angry) in their narratives, those who said that *frustration* means *mʿaṣṣib* (angry) in Kuwaiti were also asked whether or not they saw them as equal in emotional weight. Answers from the immersion learners included: '*mʿaṣṣib* (angry) literally means *angry* while *frustration* is not just *anger*' 37.5%, '*mʿaṣṣib* (angry) is stronger' 31.2%, '*frustration* is a mix of emotions that includes *anger*, *disappointment*, and *sadness*' 25%, and 'they were different' 6.2%. FL learners CEFR C said '*mʿaṣṣib* (angry) means to be *angry* and not *frustrated*' 28.3%, others said 'they were the same' 14.3%, and 'they were similar but *mʿaṣṣib* (angry) is slightly stronger' 14.3%, while others thought the opposite that '*frustration* is stronger than being *mʿaṣṣib*' (angry) 14.3%. There were also those who said '*frustration* does not have a word that equals it in Arabic' 14.3%, and '*frustration* is a mix of emotions including *anger'* 14.3%. The FL learners CEFR B did not translate *frustration* into *anger* as there was no use of *mʿaṣṣib'* (angry) in their translations as they mostly translated the English emotion word into Kuwaiti emotion words that fall under the *sadness* category.

Furthermore, participants were asked to clarify their use of *mʿaṣṣib* (angry) in their narratives and explain why it was used in cases where they described the characters as *frustrated* in their narratives. The immersion learners answered 'that it was because you are also *mʿaṣṣib* (angry) when you feel frustrated' 63%, 'that it was the only word they could think of and they realize that *mʿaṣṣib* (angry) is not *frustration*' 26%, and that '*mʿaṣṣib* (angry) is closer to *frustration* in Arabic than *muḥbaṭ* (disappointed - frustrated) as it has an element of *anger* in it, while *muḥbaṭ* (disappointed - frustrated) is more like

feeling *down'* 13%. The FL learners CEFR C explained 'that you are also *mʿaṣṣib* (angry) when you feel *frustrated*' 70%, 'that in Kuwaiti they were the same' 30%.

Most language learners, whether from the immersion or FL classroom contexts, clearly identified a difference between being *frustrated* and being *mʿaṣṣib* (angry), identifying *mʿaṣṣib* (angry) as a stronger emotion than *frustration* in emotional weight. Most have also explained the relationship between *frustration* and *mʿaṣṣib* (angry), whereby *frustration* entails feeling *mʿaṣṣib* (angry) in its mix of feelings, explaining that their use of *mʿaṣṣib* (angry) in their narratives when using *frustrated* in English was mostly due to *frustration* including *anger* in its combination of emotions. There were a few participants from the FL learners CEFR C, however, who viewed *frustration* and *mʿaṣṣib* (angry) equal in meaning and emotional weight, explaining their use in the narratives to their similarity.

Additionally, to clarify the rest of the translations to further understand their interpretations of *frustration*, those who translated *frustration* to mean *mitnarfiz* (annoyed) in Kuwaiti were also asked whether or not they perceived the words as equal in emotional weight. Answers from the immersion learners included: '*mitnarfiz* (annoyed) literally means to be *annoyed* at something or someone' 36.3%, '*frustration* is not just feeling *annoyed,* it combines feeling *annoyed* with feeling *angry*, *disappointed*, and feeling *upset'* 31.8%, 'no they were not equal' 9.1%, 'although *frustration* has a word in English that explains the feeling, the same in Arabic does not exist' 9.1%, '*frustration* is a stronger emotion than being *mitnarfiz* (annoyed)' 9.1%, and 'one can be easily *annoyed* at a simple situation whereas *frustration* needs a stronger trigger' 4.5%. FL learners CEFR C stated that '*frustration* and *mitnarfiz* (annoyed) are equal' 33.3%, and that '*frustration* combines feeling *annoyed* and *upset*' 33.3%, while the rest explained that '*mitnarfiz* (annoyed) is a more long term emotion than *frustration*' 33.3%.

Agreement on the difference between *frustration* and *mitnarfiz* (annoyed) was evident in the immersion learners' answers, whereby they found *frustration* to be a complicated mixture of emotions and not just the simplicity of feeling *annoyed*, and that *frustration* is a stronger emotion in weight that needs a stronger trigger. Meanwhile the FL learners CEFR C stated that *frustration* was equal to feeling *mitnarfiz* (annoyed), but others have also stated a difference between the two emotions whereby *mitnarfiz* (annoyed) was to feel *annoyed,* while *frustration* also includes feeling *upset*, and also found *frustration* a temporary emotion whereas feeling *mitnarfiz* (annoyed) is more long term. These FL learners CEFR C were the same participants who described the characters as *mitnarfiz* (annoyed) when they would use *frustration* as the English description of the characters' emotions. There were no FL learners CEFR B that translated *frustration* into *mitnarfiz* (annoyed).

Furthermore, those who translated *frustration* into *mitḍāyiq* (upset) in Kuwaiti Arabic were asked whether or not they perceived the two emotions as equal in emotional weight and valence. Answers from the immersion learners included: '*frustration* has much more power and is a lot more complicated and has more *anger* than just being *upset* about something' 42.3%, '*frustration* in English is different and describes one's emotion accurately while *mitḍāyiq* (upset) is just being *upset*' 28.6%, '*mitḍāyiq* (upset) means to be *upset*' 14.3%, and 'they were different' 14.3%. 25% of the FL learners CEFR C agreed that '*frustration* is more powerful than *mitḍāyiq* (upset), it is more deep', while the rest explained that '*frustration* in English describes the emotion better' 16.6%, '*frustration* has more *anger* in it' 16.6%, 'they were the same in meaning' 16.6%, 'they were related in meaning' 8.3%, and '*frustration* is more emotionally and physically exhausting and draining that pushes one to lay down and cry and feel *depressed'* 8.3%. The FL learners CEFR B unanimously agreed that '*mitḍāyiq* (upset) is equal to being *frustrated*' 100%.

Participants from the immersion learning context clearly identified a difference between being *frustrated* and being *mitḍāyiq* (upset). Some of the immersion learners have also stated that the English emotion word *frustration* describes the feeling better and is more accurate in *frustrating* situations than using *mitḍāyiq* (upset), an emotion that simply means to be *upset* and is less complicated. On the other hand, answers from the majority of the participants from the FL learners CEFR C remained quite vague, for they stated that *frustration* is more powerful and is deeper than feeling *mitḍāyiq* (upset), and that *frustration* in English describes the emotion better. However, these answers can either be taken as *frustration* in the English meaning which is a complicated combination of *anger*, *agitation*, and *sadness*, or it can be understood as *frustration* in the Arabic meaning which is closer to *muḥbaṭ* (disappointed – frustrated). Unlike the immersion learners, the FL learners CEFR C did not offer further explanations on how much of a difference they perceived between *frustration* and feeling *mitḍāyiq* (upset).

When comparing their answers from the narratives, these same participants paired their use of *frustration* in the English narratives, with their use of *mitḍāyiq* (upset) in their Arabic narratives, in which this is prevalent in clips 1 (lost item), 3 (girl with balloon), and 4 (boy wearing shirt) where they would also either describe the characters as either *sad, upset,* or *tired*. Furthermore, there were a few participants from the FL learners CEFR C along with all of the participants from the FL learners CEFR B who stated that *frustration* was equal to feeling *upset*; some FL learners CEFR C even explained *frustration* to be an exhausting tiring emotion that makes one cry and feel *depressed*.

Additionally, there were those who also translated *frustration* into *yāʾis* (despair) in Kuwaiti, and therefore, were further asked to explain how it relates to the English emotion word *frustration* and whether or not they find the meanings to carry the same emotional weight. Half of the FL learners CEFR C ($N = 2$) who have paired *frustration*

with *yāʾis* (despair) said that 'they were equal in meaning and emotional' weight 50%, while the other half explained that '*yāʾis* (despair) actually means to feel *hopeless*, *desperate*, and very *sad* and that is not what to feel *frustrated* means' 50%. When he were asked why he provided *yāʾis* (despair) as a meaning for *frustration*, he explained that it was the only word they could think of on the spot since they feel that there does not exist a word in Arabic that has the same meaning as *frustration*. The participant from the FL learners CEFR B who provided *yāʾis* (despair) as an Arabic translation for *frustration* stated that 'they were the same'. Indeed, he was the same participant who described the character as *yāʾis* (despair) in situations where he also used the English emotion word *frustration*.

And finally, those who translated *frustration* into *zaʿlān* (sad) were also asked whether or not they were equal in emotional meaning and emotional weight. The participant from the FL learners CEFR C who said that *frustration* is closest to *zaʿlān* (sad) in Arabic said that '*frustration* includes *anger* in it, while being *sad* is just that, there is no *anger* in *sadness*', whereas the participant from the FL learners CEFR B who translated *frustration* as *zaʿlān* (sad) said that 'they were equal in meaning and emotional weight'. Immersion learners did not translate *frustration* into feeling *zaʿlān* (sad), or feeling *yāʾis* (despair).

To summarize these translations, translations of *frustration* included Arabic words that fall into the categories of *anger, irritation,* and *sadness* such as *muḥbaṭ* (disappointed - frustrated), *mʿaṣṣib* (angry), *mitnarfiz* (annoyed), *mitḍāyiq* (upset), and *zaʿlān* (sad) among the immersion learners. Although immersion learners translated *frustration* into *muḥbaṭ* (disappointed – frustrated), *mʿaṣṣib* (angry), and *mitnarfiz* (annoyed), they unanimously agreed that these emotion words differed from *frustration* in meaning and in emotional weight. The same appeared among the FL learners CEFR C but with increased use of words that fall into the category of *sadness* such as the use of

words like *muḥbaṭ* (disappointed - frustrated), *mitḍāyiq* (upset), *zaʿlān* (sad), and *yāʾis* (despair) in addition to *mʿaṣṣib* (angry) and *mitnarfiz* (annoyed). The FL learners CEFR B also translated *frustration* to mean *muḥbaṭ* (disappointed - frustrated), *mitḍāyiq* (upset), *zaʿlān* (sad), and *yāʾis* (despair), words that fall into the category of *sadness* and did not offer words that fall into the category of *anger* such as *mʿaṣṣib* (angry) and *mitnarfiz* (annoyed). The majority agreed to *frustration* being equal to those emotions. These translations can be linked back to the Arabic conceptualization of *ʾiḥbāṭ* (disappointment - frustration), which includes more *sadness,* as opposed to the English conceptualization of *frustration,* which includes more *anger* than *sadness.* Therefore, the majority of the FL learners seem to have related feeling *frustrated* to feeling either *disappointed, annoyed,* or *sad/upset.*

As an extra measure, they were asked whether they perceived any difference between *disappointment* and *frustration*, *annoyance* and *frustration*, as well as between *sadness/upset* and *frustration* in order to evaluate whether or not participants perceive a difference between the English emotions as they do or do not between *frustration* and the equivalent Arabic emotion words. Firstly, the difference between *disappointment* and *frustration* was inquired. The immersion learners said that '*frustration* is a stronger emotion than to simply feel *disappointed* about something or someone' 40%, '*frustration* includes a certain amount of *disappointment*, but is a lot stronger and is more tense' 40%, and '*frustration* comes from a blocked goal' 20%. The FL learners CEFR C stated that '*frustration* is a stronger emotion than *disappointment*' 52%, while others said 'they are almost the same' 32%, and '*frustration* comes from a blocked goal' 16%. As for the FL learners CEFR B, the majority agreed that '*frustration* and *disappointment* are very similar' 67%, while others said that '*frustration* results from a blocked goal' 33%.

While immersion learners and almost half of the FL learners CEFR C agreed on differentiating between *disappointment* and *frustration,* others along with a number of

the FL learners CEFR B agreed on the fact that *frustration* comes from a blocked goal, which is what triggers *muḥbaṭ* (disappointed – frustrated) as opposed to feeling *xāybat ʾamal* (disappointment). Perhaps these comparisons are harder to inquire about since *muḥbaṭ* (disappointed – frustrated) is a feeling that differs from *disappointment* and *frustration*, and like *frustration*, does not have an equivalent in the English language.

When inquiring the difference between *annoyance* and *frustration*, the immersion learners explained that '*frustrated* is a stronger emotion than feeling *annoyed*, it is more tense' 47%, '*annoyance* is included in *frustration'* 24%, '*frustration* results from trying to achieve something but you are unable to, but when you are *annoyed* you are just *annoyed*' 18%, 'the difference is not clear in Arabic between the two emotions as they are in English' 12%. The FL learners CEFR C said that '*frustration* is a stronger emotion than feeling *annoyed*' 30%, 'they both result of when you feel you cannot do anything' 26%, '*frustration* is like feeling *sad,* but *annoyance* is when you have a little bit of a temper, like *angry* a little' 21%, 'you are *annoyed* first then you feel *frustration* after like *angry'* 15%, and '*frustration* has a mix of *sadness* in it' 8%. The FL learners CEFR B said that '*frustration* is similar to feeling *sad* when *annoyed* is like feeling *angry* a little*'* 67%, and that '*frustration* is a stronger emotion than *annoyance*, it is more exhausting and has more weight in the heart*'* 34%.

Data from the immersion learners revealed that they clearly separate *frustration* from feeling *annoyed* in terms of the trigger (blocked goal), emotional weight, and the tension that *frustration* includes. On the other hand, the FL learners CEFR C answers revealed that in some participants' answers the emotion terms overlap which is similar to their translations of *frustration* as *mʿaṣṣib* (angry) and/or *mitnarfiz* (annoyed), and in other answers *frustration* is related to *sadness*, which was what the FL learners CEFR B agreed on as well.

With regards to differentiating between feeling *frustrated* versus feeling *sad* or *upset*, the immersion learners explained that '*frustration* has *anger* and *agitation* in the emotion as opposed to *sadness* and feeling *upset*' 50%, '*frustration* comes from a blocked goal, *sadness* is from something that just makes you *sad*' 25%, and '*frustration* is not as long term as *sadness'* 25%. Participants from the FL learners CEFR C explained that '*frustration* comes from a blocked goal' 38%, others said that '*frustration* is like feeling *upset* but is more deep in the heart' 31%, '*frustration* makes you feel *tired*' 8%, and '*frustration* comes after feeling *sad*' 8%. As for the FL learners CEFR B, the majority felt that '*frustration* and feeling *sad* or *upset* are almost the same' 38%, '*frustration* includes feeling *sad* in it' 25%, '*frustration* is more like feeling *depressed* like it's the end, but when you are *upset*, it's just that' 25%, and '*frustration* comes from a blocked goal' 13%.

Similarly to the FL learners' answers in their translation pairings of *frustration* with either *mitḍāyiq* (upset), or *zaʿlān* (sad), or *yāʾis* (despair), the majority found *frustration* a similar emotion to *sadness*, the only difference perhaps between those two emotions, as they stated, was that *frustration* is a result of a blocked goal, and bears similarities to *muḥbaṭ* (disappointed - frustrated), an emotion they viewed as tiring, more depressing, and heavier in the heart due to the *disappointment* of the obstructed goal. The reason why *frustration* and *sadness* were paired as similar is due to the association between *muḥbaṭ* (disappointed - frustrated) and *frustration* in terms of the shared definition of both being emotions that result from a blocked goal. While *muḥbaṭ* (disappointed - frustrated) is more related to the heaviness of *sadness* and *disappointment*, *frustration* is more of an active reaction, nevertheless, these participants seem to display a form of negative transfer or influence where they attached the meanings and associations of the L1 equivalent to the L2 emotion word, resulting in blurring the lines between the English *sadness* and *frustration*.

6.3.4.5: Explanations on the use of *muḥbaṭ* (disappointed - frustrated) in the narratives

To further establish whether or not a crosslinguistic influence exists, the participants' use of *muḥbaṭ* (disappointed - frustrated) in the narratives was further examined in the interview since their definitions and translations of *frustration* revealed interesting differences between the learners. Those who used *muḥbaṭ* (disappointed - frustrated) in their descriptions of the characters' emotions were asked to explain what they meant by *muḥbaṭ* (disappointed - frustrated) in their narratives. Answers from the immersion learners included: '*frustrated* but it's not the exact translation' 71%, and '*disappointment*' 29%. Answers from the FL learners CEFR C included: '*disappointment*' 45%, '*frustration*' 18%, '*depression*' 18%, '*upset*' 9%, and '*despair*' 9%. Answers from the FL learners CEFR B included: '*sadness*' 50%, '*disappointment*' 25%, and '*depression*' 25%. As for the Arabic monolinguals, they explained that their use of *muḥbaṭ* (disappointed - frustrated) was to mean '*disappointment*' 43%, '*upset*' 29%, and '*depression*' 29% in Arabic.

Such results support the fact that the use of *frustration* in English is influenced by their use of *muḥbaṭ* (disappointed - frustrated) in Arabic in the FL learners CEFR C and FL learners CEFR B narratives. On the other hand, the use of *frustration* in Arabic in the immersion learners' data was influenced by their English language whereby learning the English emotion word *frustration* and being exposed to its social and emotional contexts via their immersion learning setting has restructured the previous meaning of *muḥbaṭ* (disappointed - frustrated) into one that is more emotionally charged.

6.4: Further qualitative observations from the narratives

Qualitative analysis of the narratives examines evidence of semantic extension, conceptual transfer, lexical borrowing, loan translation, and avoidance. The qualitative analysis of the *frustration* narratives revealed two instances made by immersion learners

of having trouble finding an Arabic emotion word to best describe the character in clip 5 (shower prank) when describing the emotion in Arabic, but found no trouble in their English narratives of the same clip where they used the emotion word *frustrated* in their descriptions. This observation was not found among the rest of the FL learners groups.

Example 1:

> šakla fi šabāb msawwīn fīh dagga . . . fawohwa gāʿid yitsabbaḥ yḥiṭōn lah shampoo ʿala rāsah . . . w kil mā yšīlah yḥiṭōn lah ziyādah . . . faʾawwal šaī ʾistaɣrab . . baʿdayn *tinarfaz* . . . laʾ mā *tinarfaz* mādri šinū ʾilkilmah . . . yimkin *tinarfaz* ʾaū ʿ*assab*

Translation:

> *there were a bunch of boys pranking another while he was in the shower and kept on adding more shampoo on his head, and when he manages to wash it off, they kept on adding more, and so at first he was confused and then he was annoyed, no he was not annoyed, I do not know the exact word, maybe annoyed or angry*

Example 2:

> wāḥid gāʿid ysawwi ʿala ʾilθāny niktah . . . w haðāk gāʿid yitsabbaḥ mā yadri gāʿid ywaxir ʾilshampoo min šaʿrah . . . bas ʾistawʿab ʾinna mū rāḍi yrūḥ . . fatam yɣassil w ʾohwa lilḥīn mū rāḍi yrōḥ faʿ*assab* . . . laʾ mādri ʾiða ʿ*assab*. . . ʾau yimkin *tinarfaz* mādri šlōn ʾagūlha

Translation:

> *a person pulling a practical joke on another . . . and while the other was showering unaware trying to wash out the shampoo from his hair . . . he realized that it was not washing out . . . and so he kept on trying and scrubbing but to no avail and so he became angry . . . no I do not know if he was angry . . . or maybe he was annoyed I do not know how to say it*

This can be taken as a sign of conceptual transfer as the concept of *frustration* was internalized into their mental lexicons, but because it lacks an adequate translation equivalent in their Arabic; these participants found it difficult to explain the emotion when they felt their available Arabic emotion words failed to equate the intensity, meaning, and weight of the English *frustration.*

Further examples included evidence of lexical borrowing into L2 English when speaking in their L1 Arabic. These examples were also found in the immersion learners' narratives but not amongst the FL learners.

Example 1 from Clip 2 (computer man):

> wāḥid gāʿid ʾibmaktibbah . . . šakla šiɣlah wāyid muhim w yimkin warāh taslīm . . . w šakla ʾilkambyūtar ʾixtarab ʿalēh w fiṣal . . . wāyid kān frustrated . . . frustrated ʾaqṣid miθil ʾilly tinarfaz w baʿdēyn ʿassab w gām yṭiq ʾilšāšah w yṭiq ʾilkeyboard . . . ʾāxir šaī kassar ʾildinya w miša

Translation:

> *a person was at his work desk . . . it looks like he was working on something important, perhaps he had a deadline to meet . . . it looks like his computer crashed on him and broke down . . . he was very frustrated . . . frustrated I mean like he got annoyed and then he got angry and started to hit the screen and hit the keyboard . . . in the end he just broke everything and left*

Example 2 from Clip 3 (girl with balloon):

> bnayya ṣɣīra . . . gāʿda tḥāwil tṣīd balōna bas mū gādra tṣīdha laʾanha gṣīra . . . fa maskīna gāʿda tḥāwil w tḥāwil w tḥāwil bas mū gādra . . . fa gām yḥūša frustration . . . mū ʾiḥbāṭ bilʾawwal kiθir ma ʾihya tinarfizat min muḥawalātha . . . ʾaxir šaī ʾinsadḥat w zʿalat

Translation:

> *a little girl . . . she was trying to catch the balloon but is unable to because she was short. . . so the poor thing was trying and trying and trying but still cannot catch it . . . so frustration took over . . . its not exactly disappointment at first as much as she was annoyed at her failed attempts . . . in the end she lay down and felt sad*

Furthermore there was also an example of using a derivation of muḥbaṭ when describing the emotional experience in the L2 and equating the meaning with being depressed, and another possibility of avoidance. These examples were made by two different participants from the FL learners; this occurrence was not made by any immersion learner.

Example 1 (FL learner C) from Clip 1 (lost item):

> there was a man in this cartoon . . . he was he was looking for something . . . he was searching for it everywhere he could think of in the drawers cabinets boxes . . . everywhere . . . in the end he still couldn't find it . . . and you see the green lines are filling up his insides . . . taḥabbaṭ . . . sorry I mean like he was depressed

Example 2 (FL learner B) from Clip 3 (girl with balloon):

> in the video there was a girl trying to catch her balloon but she can't reach it . . . she jumps and pushes her hands up as much as she can but she can't get it . . . she cries and feels sad and like mitḥabṭa

6.5: Summary

To summarize the findings from this chapter, in cases of nonequivalence, similarly to the results from *excitement* where there was a partial equivalence, there was no evidence of crosslinguistic influence, whether the L1 on the L2 or the L2 on the L1, on the length of the narratives, the use of emotion lemmas, or the use of emotion word tokens in the participants' descriptions of the characters' emotions from the *frustration* video clips. Further analysis on the target emotion word *frustration* revealed that context of learning is the most important factor in increasing the use and understanding of this L2 emotion word, followed by foreign language proficiency. Other factors also include: age of acquisition of English, age of acquisition of *frustration*, frequency of use of English, frequency of use of *frustration,* and dominance in the L2. Like the pattern found in the *excitement* data, the immersion learners resembled the target language control group, followed by the FL learners CEFR C, and then the FL leaners CEFR B in their use of *frustration*.

Both SPSS and NVivo results revealed that the immersion learners displayed evidence of a possible L2 English influence on their use of L1 Arabic when describing the emotional state of the characters in their narratives. Their definitions, use, and translations of *frustration* approximated those from the native English speakers. The immersion learners defined *frustration* as a complicated emotion that includes *anger*, *irritation*, and *sadness*, and explained the emotion to be a physiologically charged one that includes energy, movements, and overall physical tension. These definitions approximated the ones given by the English native speakers, i.e. the target language group, and differed from the subdued and heavy definition of the emotion of *ʾiḥbāṭ* (disappointment - frustration), which includes the feelings of *sadness*, *despair*, *depression*, and *disappointment*. This was also reflected in their narratives and descriptions of the characters' emotions where they mostly used the target emotion word

frustrated in the English narratives resembling the English native speakers, and did not use words that fall into the categories of *sadness* and *despair* as did some of the FL learners CEFR C and the FL learners CEFR B. Furthermore, in their framing of the emotional state in clips 3 (girl with balloon) and 4 (boy wearing shirt), the immersion learners have also approximated the target language group in their use of *frustration* as the feeling the characters are going through during their unsuccessful tries, which differed from how some of the FL learners described the characters emotions as feeling *sad, disappointed, and depressed* and using *frustrated* as an end state which is how the emotion word *muḥbaṭ* (disappointed - frustrated) is likely to be used due to the way it is conceptualized. This was also reflected in the immersion learners' descriptions of the physiological reactions of the characters in the clips using more references to the emotional display approximating the English native speakers not only in the increased use of the physiological references but also in the references themselves. They did not use references to the characters feeling *tired*, or *laying down* which are more commonly associated with *muḥbaṭ* (disappointed - frustrated). Furthermore, their narratives displayed the increased use of the emotion word *mʿaṣṣib* (angry), albeit similar to the rest of the Arabic speaking groups including the monolingual control group, their explanations as well as their translations and explanations of *frustration* and on their use of *frustration* in English*, mʿaṣṣib* (angry), and *muḥbaṭ* (disappointed - frustrated) in Arabic, revealed differences when compared to some of the FL learners CEFR C and the FL Learners CEFR B as well as the Arabic monolinguals. These differences provide the possibility of an L2 influence on the L1 in the immersion learners group since they differed from the Arabic conceptualization of *frustration*, i.e. *muḥbaṭ* (disappointed - frustrated) and adopted the English conceptualization of *frustration.* Their narratives also displayed examples of conceptual transfer.

Meanwhile, the same did not occur with some of the FL learners CEFR C, and almost all of the FL learners CEFR B. They seemed to project evidence of a negative transfer and a possible L1 Arabic influence on their use and understanding of L2 emotion words. These learners defined *frustration* as a feeling of *sadness*, *depression*, *despair*, and *hopelessness* that is physically tiring and draining, almost melancholic. These subdued reactions matched those of the Arabic emotion *muḥbaṭ* (disappointed - frustrated). This was not only reflected in their Arabic and English narratives, their attention to the physiological reactions the characters made, and how the emotional states were framed in the video clips, but also on the translations given for the word *frustration* and the distinctions between *frustration* and both English and Arabic equivalents of *disappointment, annoyance,* and *sadness.* Some even displayed a negative transfer in the form of equating the English emotion of *sadness* to *frustration* blurring the lines between the two emotions due to the meanings attached to the Arabic equivalent *muḥbaṭ* (disappointed - frustrated).

To conclude, although the Arabic narratives mostly displayed an increased use of the emotion word *mʿaṣṣib* (angry) especially amongst the immersion learners, their explanations from their interview provide evidence that the emotion described is closer to the English emotion of *frustration*, but due to the lack of an adequate Kuwaiti emotion word that equates *frustration* as an emotional concept, these learners opted to describe the emotion as *mʿaṣṣib* (angry) rather than the dictionary paired *muḥbaṭ* (disappointed - frustrated). The learning of *frustration* as an English emotion word that adequately explains the emotional concept and connotations of this emotion provided these immersion learners with the opportunity to understand and perceive the emotion of *frustration*, as opposed to the other learners from the FL learning classrooms who perceived the projected emotion as that of *muḥbaṭ* (disappointed - frustrated) having been influenced by their L1.

Chapter 7: CONCLUSION

7.1: Introduction

This chapter concludes the thesis by summarizing the frameworks and methods used and reiterating the general findings, reviewing whether the aims of the study have been met, and whether the research questions have been answered. This chapter discusses the results in comparison to Pavlenko's (Dewaele & Pavlenko 2002; Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007) and Panayiotou's (2004a; 2004b; 2006) research on emotion words. The chapter also discusses the results using the framework of CLI, but also adding insight to the linguistic relativity hypothesis as well. Furthermore, limitations of this study are discussed towards the end of this chapter and suggestions are made to address these limitations in future research. The chapter also offers pedagogical implications on L2 emotion word teaching and finally concludes with suggestions for future research.

7.2: Emotion lexical choices

At the very beginning of this thesis, I questioned: Can the learning of another language influence the way we interpret and express emotional situations? This study looked into the effects of learning English as a foreign language on the use of the L1 Arabic with focus on two emotional expressions. The study looked into the emotional expressions of different levels of L2 English learners in their L1 Arabic and their L2 English when faced with a partially equivalent emotion word, *excitement* and a nonequivalent emotion word, *frustration.* The study uses a mixed method design where the main methodology used for data collection was narrative elicitation using video clips depicting the L2 target emotions, and was supplemented with an interview towards the end of the testing session. The study mainly applied the crosslinguistic influence hypothesis as its theoretical framework in data collection and data analyses. The main contribution this study offers is the examination of the possibility of finding CLI effects

in the use of L2 specific emotion words and concepts in foreign language learners' narratives in the L1 and the L2 since previous studies found no evidence of L2 influence on the L1 or on the internalization of L2 specific concepts. In fact, previous studies that looked at foreign language learners found evidence of L1 influence on the L2 and evidence of avoidance in the use of L2 specific concepts and emotion words.

To answer the research questions posed in this study in Chapter 3. Firstly, answering Research Question 1, there were indeed lexical and conceptual differences in the emotion words used to describe the emotional state of the characters in the video clips in the L1 and the L2. These differences are explained by the differences in how each language encodes and conceptualizes the emotional experience of *excitement* and *frustration*. The differences in the emotional expressions of *excitement* and *frustration* between English and Arabic provided examples that can be taken as evidence that each culture and language does indeed attach different attributes to the same emotional experience supporting Wierzbicka's claims (1986b; 1994; 1998b; 1999). This also supports Scherer's (2005) view that language plays a role in the emotional encoding of emotion terms. He called for examining the subtle differences in meanings of emotion terms between different cultures and languages, which will help discover cultural and linguistic differences. According to Scherer, emotions are language and culture based, and they correspond to unique response patterns, such as specific facial expressions, vocal expressions, and physiological responses. Therefore, even in identical eliciting situations, differences between individuals arise due to the differences in how different cultures and languages perceive a given emotion and how they encode it (2009b). To further elaborate, applying Russell's (1980) Circumplex Model to this discussion, which defines emotions as distributed in a two-dimensional circular space containing valence, whether negative or positive, and arousal, whether energetic or lethargic, reveals differences in how different languages perceive the same emotional situation. When

considering the English emotion *excitement*, according to Russell, it involves high pleasure and high arousal, and when it is compared with the most used emotion word in the Arabic data *mistānis* (happy), the equivalent English emotion *happy* involves high arousal but lower pleasure. Additionally, when considering the English emotion *frustration*, which involves high arousal and high displeasure, and comparing it with the most used emotion word in the Arabic data *mʿaṣṣib* (angry), the English equivalent *angry* involves higher arousal and higher displeasure on the axis. When taking into consideration the closest equivalent to *frustration* in Arabic, *ʾiḥbāṭ* (disappointment - frustration), the closest English equivalents *tired* and *depressed* involve low arousal and high displeasure (Russell 1980, p.1167). The same video clips were shown to all participants, yet differences were found not only between different language speakers, but also between different levels of L2 learners. This leads to the following discussion on the CLI effects found due to the differences between English and Arabic in their conceptualizations of *excitement* and *frustration.*

7.3: Crosslinguistic Influence

Answering Research Question 2 regarding crosslinguistic influence, there was evidence for crosslinguistic influence in foreign language contexts where there was evidence of L2 influence on the L1, L1 influence on the L2, restructuring of the L2 conceptualizations onto the L2, and internalization of the L2 concepts. To summarize and discuss results in terms of the crosslinguistic influence hypothesis, there were no crosslinguistic effects found on the diversity and richness of emotion words in the narratives. Some of the previous studies on crosslinguistic influence that looked into narrative length and diversity of the emotion words in the narratives found no increase in narrative length or use of emotion words (Pavlenko 2002b). In other studies, however, an increase was found in the length of the L2 learners' L2 narratives, an observation that was also found in this study amongst the immersion learners' L1 and L2 narratives, but

this did not increase the use of L2 emotion words (Pavlenko 2008d; Pavlenko & Driagina 2007). Therefore, it was found that the learning of another language has no immediate influence on the length of narratives or on the diversity and richness of emotion words in the target language.

On the other hand, a systematic pattern emerged from the results from the *excitement* and *frustration* narratives and interviews in terms of finding similarities within the groups, and this was seen with the immersion learners resembling the English native speakers, and also a number of the FL learners CEFR C and the FL learners CEFR B resembling the Arabic monolinguals. There were also systematic differences that were found between the groups, and this is evident in the English and Arabic control groups differing in how each language encodes the emotions of *excitement* and *frustration* and the different emotional and physiological connotations that are attached to those emotion words. This is reflected in their interpretations and emotional descriptions in their narratives, as well as their definitions in the interview. The different focus groups also displayed similar differences that resembled the patterns and differences found between the English and Arabic control groups depending on the learners. Finally there was also evidence of crosslinguistic performance congruity in the form of L2 influence on the L1, or L1 influence on the L2 as discussed in the previous results chapters.

Furthermore, the current study provided evidence of four out of the seven processes which Pavlenko (1999; 2003b; 2008b; 2011c; 2014) proposed as a framework on the processes of language influence that take place in the learners' lexicon namely: L1 influence on the L2, L2 influence on the L1, internalization, and restructuring. Examples of L1 influence on the L2 and of L2 influence on the L1 were discussed at large in the results Chapters 5 and 6. As for evidence of internalization, which is when the learners internalize the L2 semantic and conceptual meanings when learning a new concept that may not be available in the L1, the immersion learners displayed evidence of

internalization specifically in their *frustration* narratives and interview. These immersion learners internalized the concept of *frustration* in the L2, an emotion concept that has no equal equivalent and is different in the L1 in emotional weight and physiological connotations where *ʾiḥbāṭ* (disappointment - frustration) is available as the closest equivalent. They internalized the emotion of *frustration* as an emotion that is charged with tension as opposed to its melancholic and subdued Arabic meaning with numerous examples in their narratives including their resemblance to the native speakers of English, their framing of the emotional state of the characters, instances of conceptual transfer, and their explanations and definitions of *frustration* in their interviews as previously discussed in Chapter 6. And finally evidence of restructuring, which is a slow shift from the L1 conceptualization towards the L2 but not fully resembling it, can be found in some of the FL learners' CEFR C performance in their use and definitions of the target emotion words. They do not fully resemble the L2 control group, but shift away from the L1 patterns as displayed by the rest of their peers and by the FL learners CEFR B. It is as if they are restructuring the previously embedded concept by incorporating the new one.

The performance of the FL learners can be explained by Kellerman's (1995) Transfer to Nowhere Principle that looks into the mental organization of the concept of the L1 as a pattern that dictates the use of the L2. Kellerman stated that learning an L2 benefits from the previously embedded concepts in the L1. Learners identify the similarities between their L1 and L2, but are faced with difficulties when they come across crosslinguistic conceptual differences such as cases of nonequivalence. Such differences result in the FL learners unconsciously linking the L2 words onto their L1 conceptual patterns, leading to what is called a 'blind transfer'. However, Kellerman also stated that the more active the learner is in the L2 and the more of the L2 is acquired, the distance between the L1 and the L2 in the mind is decreased, which explains the

performance of the immersion learners in this study as well as some of the FL learners CEFR C.

In sum, since each language attributes different connotations and conceptualizations to the same emotional experience, the learning of a new language, where the emotional concepts differ, can affect the emotional experience in the L1. As this study's results suggest an influence of language in the use of another, an example being the immersion learners recognizing the emotion concept of *frustration,* which is not encoded in their L1 and even displayed an influence of the L2 concept in their L1 narratives. Results also displayed evidence of internalization and restructuring of the previous L1 emotion concepts into newly acquired L2 concepts that differ in meaning and in emotional weight. Furthermore, the participants also displayed an effect of language learning on how different their definitions were of what constitutes *frustration* and the physiological reactions it entails, where similar results were also seen in some cases from the *excitement* data.

In comparison to previous studies, the study revealed that partial equivalence leads to partial acquisition with instances of L1 influence as found in the analyses of the *excitement* narratives, and that translation nonequivalence can hinder and complicate the internalization of L2 specific emotion words as found in the results from the *frustration* narratives (Dewaele & Pavlenko 2002; Jarvis & Pavlenko 2010; Pavlenko 2002a; 2002b; 2008d; 2009; 2014; Pavlenko & Driagina 2007). In cases of partial equivalence, as in the word *excitement*, although it is easier to translate and has higher codability, systematic patterns of a crosslinguistic influence were still found in the use of the target emotion word among the different levels of language learners, albeit less than what was found in the *frustration* data. The partial equivalence between *happiness* and *excitement* between the L1 Arabic and the L2 English lead to the internalization of the L2 *excitement* but with a number of cases displaying an L1 influence on the L2 and cases displaying an L2

influence on the L1. Similar results were found in the *anger* words in Russian versus English in Pavlenko's study (Pavlenko & Driagina 2007). Stepanova and Coley (2002; 2006) also found evidence of L2 influence on the L1 and the coexistence of L1 and L2 categories between the partially equivalent emotion words *envy* and *jealousy,* since the emotion word *jealousy* in English is synonymous with *envy,* while *revnost* in Russian only refers to *jealousy* but not *envy*.

Previous studies on translation nonequivalence in the words *frustration, perezhivat,* and *stenahoria* revealed instances of L2 influence on the L1, internalization of L2 specific categories and patterns, and L1 influence on the L2 (Panayiotou 2004a; 2004b; 2006; Pavlenko 2002a; 2002b; 2008d; Pavlenko & Driagina 2007) which were also found in the results from this current study. Examples from the immersion learners include instances of conceptual transfer in their narratives, such as their difficulty in describing the emotion in Arabic because of the lack of an Arabic translation and conceptual equivalent to the English word *frustration,* while this is not reflected in their corresponding L2 narratives where they used *frustration* in their English descriptions. Thus displaying a possible internalization of the L2 emotion word *frustration* that deviates from the Arabic L1 equivalent in meaning and in emotional weight.

On the other hand, differences were also found between results from this study in comparison to Pavlenko's (Pavlenko 2008d; Pavlenko & Driagina 2007) whereby results revealed CLI effects in the form of L2 influence on the L1 in the immersion learners' data. This was not found in Pavlenko's studies that looked at immersion learners in foreign language contexts even though the participants in her study identified the emotion words in question and reported learning them in their L2 classrooms.

7.4: Variables that affect L2 specific emotion word use

This brings in the factors that aid the access and use of L2 specific emotion words, which answers Research Question 3. Analyses on which factors increase the use

and understanding of the target emotion words revealed that context of learning is the most important factor followed by foreign language proficiency. This is supported by previous studies that provided evidence that proficiency alone is not the only determining factor in L2 emotion word use (Dewaele & Pavlenko 2002; Jarvis & Pavlenko 2010; Pavlenko 2014). In fact, Kellerman (1995) stated that the higher the L2 proficiency, the less L1 influence there is on the L2, but is not the only factor for even with high proficiency there seems to be cases of L1 influence which is evident in the data from the FL learners CEFR C in cases of nonequivalence. This suggests the importance of the L2 learning context. Evidence from the study suggests that target like use of L2 emotion words can be achieved in the L1 speaking country but only in immersion schooling contexts.

Furthermore, other factors that affected the use of the target emotion words included age of acquisition of English and age of acquisition of the emotion word, which have affected the use of *excitement.* Additionally, other factors that affected the use of *frustration* but not *excitement* were: the frequency of use of English, the frequency of use of the target word, and language dominance in the L2. This suggests that such factors only affect nonequivalent emotion words and have no affect on partially equivalent emotion words.

7.4.1: Effects of context of learning on L2 emotion words

The current study highlights the importance of context of learning in the interpretation and use of L2 specific emotion words. More importantly, the results showed that the learning of nonequivalent emotion words in the L2 can be facilitated and internalized in immersion contexts in foreign language classrooms. Learning an L2 in the target language contexts such as learning English in an English speaking country gives the learner more chances to socialize, use, and internalize L2 emotion words, as opposed to the foreign language classroom contexts of learning such as learning an FL/L2 in the

L1 speaking country. In fact, examples from previous studies showed that those who learned their L2 in the L2 context, i.e. in the target language context, resembled the target language monolinguals and/or shifted from the L1 monolinguals in their use of emotion words (Pavlenko 2002a). Meanwhile, those who learned their L2 in immersion classrooms in the L1 context displayed an L1 influence on their use of L2 specific emotion words, but showed no evidence of L2 influence on their use of L1 emotion words (Pavlenko 2008d; Pavlenko & Driagina 2007). This study revealed evidence of L1 influence on the use of L2 emotion words such as the examples from some of the FL learners, which was also found in previous studies that looked at foreign language classrooms in L1 contexts as opposed to immersion L2 classrooms in L2 contexts (Jarvis & Pavlenko 2010; Pavlenko 2002a; 2008d; 2011b; 2014). Nevertheless, results also revealed evidence of the possibility of internalizing L2 specific emotion words, including nonequivalent emotion words, in foreign language contexts provided they are learned in immersion classrooms.

To further elaborate, as previously explained in this chapter, *frustration* as an emotion is encoded differently in English than it is in Arabic specifically in the Kuwaiti dialect, which lead to differences in how the emotion was interpreted by the different learners. These differences have also influenced the way the emotion was interpreted in the other language, whether the English on the Arabic or vice versa, and influenced the ways the emotion was framed and interpreted by these learners. We find that the immersion learners have internalized the English specific emotion word in all of its conceptual connotations and physiological attributes and approximated the English speakers' references, uses, and definitions of the emotion. This is in contrast to some of the FL learners, who have defined the emotion but were unable to use the emotion word in its L2 context, and were at times affected by the inadequate L1 conceptualization of the translation equivalent *ʾiḥbāṭ* (disappointment - frustration). This can be explained by

the differences in the teaching approaches and concentration between the two foreign language learning contexts. Because immersion classrooms are taught in a communicative setting, the L2 becomes linked to thought, leading to the internalization of L2 specific emotion words and concepts as opposed to being taught the L2 using translations which caused the FL learners to link the L2 specific emotion words to the partially equivalent and the nonequivalent L1 translations.

Although this study partly replicates research done by Pavlenko on emotion words as previously discussed, its main contribution aims to compare immersion and non-immersion L2 learning classrooms in the context of the L1 arguing for the possibility of the learning of L2 specific emotion words and the possibility of a crosslinguistic influence in the use of L2 emotion words when previous studies revealed none (Pavlenko 2014). The study reiterates the importance of the context of learning of the L2 when not in the target language country, an area that is not as widely researched as much as research done in the target language contexts. Those in the immersion language learning contexts benefitted from the L2 socialization that their schools provide, and the frequency of use of the L2 emotion words since these schools focus on using the L2 in and out of the classroom.

7.5: Linguistic relativity

These results can also be discussed using the linguistic relativity hypothesis (Whorf 1956) due to the overlap between the hypothesis and crosslinguistic influence. I have previously argued in Chapter 2 (section 2.4) that there seems to be quite a similarity between linguistic relativity and CLI, as they both look into the influence of language on conceptual perception via the expressions used in the other language. Conceptual transfer, or the crosslinguistic influence on an experience in another language, can be 'defined as those cases of linguistic relativity involving, most typically, a second language' (Odlin 2005, p.5). However, this claim is when the linguistic relativity

framework is applied on habitual linguistic thought, in other words on verbal behaviour, rather than the widely debated nonverbal cognitive behaviour. This is not to claim that all evidence of CLI is evidence for linguistic relativity or vice versa (Bylund & Athanasopoulos 2014; Jarvis 2016), since linguistic relativity is far more complicated than simply looking into changes and differences in linguistic and verbal expressions between the L1 and the L2. Linguistic relativity, even Whorf's linguistic hypothesis, involves a look into changes or influences in 'world views', and since this study involves looking at the language of emotions, '[E]motion words are, above all, *words* – like all words, they display cross-linguistic variation, effects of language change, shifts in meaning, and cognitive restructuring' (Pavlenko 2014, p.296). Results suggest evidence of linguistic relativity when looking at the use of emotion words between the L1 Arabic and the L2 English; nevertheless, the current study is still in need of further work with focus on the emotional nonlinguistic expressions such as measuring physiological reactions, comparing facial expressions, and gestures, etc. in addition to the linguistic to provide a more sound argument against the many criticized versions of linguistic relativity especially since emotions entail both a linguistic and a nonlinguistic outlet.

Nevertheless, contrary to the misinterpretations of Whorf's linguistic relativity principle, the lack of a word does not mean that the concept does not exist in a given language. For example, the fact that Kuwaiti's lack a word for *frustration* does not mean that they do not feel such an emotion, and this is evident in the participants' use of *mʿaṣṣib* (angry) in the Arabic narratives, which is physiologically closer to *frustration* than muḥbaṭ (disappointed - frustrated). This also provides support to Ekman's (2004a) argument that the lack of an emotion word does not mean that a certain culture or language does not feel a certain emotion. In fact, Whorf simply pointed out that due to the lack of certain vocabularies or differences in semantic and conceptual equivalents, understandings of the same realities can still be reached but not as automatically as those

who have such vocabularies readily available and frequently accessed. This explains the immersion learners' use of the target emotion words since they use these words more frequently and have internalized the L2 emotion concepts rather than having these concepts linked to partially equivalent or nonequivalent concepts in the L1 as opposed to the other FL learners. Having the L2 emotion words readily available and having understood the conceptualizations of these L2 emotion words both emotionally and physiologically lead to the immersion learners' ease of access and use of these emotion words resembling in their use the native speakers of the L2. This automatic access is not readily available in the L1 since the adequate words considerably differ from those available in the L2, thus affecting the emotion words used by the Arabic monolinguals and some of the FL learners. These Arabic monolinguals and FL learners do feel *frustrated,* but are pointed to different understandings on what *frustration* entails. This introduces Research Question 4, which looks at how language acts as an attention directing or filtering mechanism, which can also be traced back to Whorf's relativism.

7.6: Emotional display and physiological references

Research Question 4 inquired about whether or not differences exist between the English and Arabic control groups in their observations of the emotional display of the target emotion words, and whether or not these observations are reflected in the immersion learners' and the FL learners' references of the emotional display in the L1 and the L2. The results showed an increase in the L2 words that refer to the physiological state of the characters in the video clips than in the L1, which was similar to the pattern found in the target language control group in their increase of use of references of the physiological state of the characters as opposed to the Arabic control group. This increase can be explained by previous studies on emotions and the body where it was found that certain languages encode more attention to emotions and their representation on the body than others, for example, Russian speakers paid more attention to the

physiological manifestations of the tested emotions than English speakers (Pavlenko 2002b; Wierzbicka 1992; 1998a; 1999).

Moreover, the physiological references themselves differed between the language groups where the Arabic monolinguals would note the characters' subdued, tired, and melancholic attributes which can be traced back to the emotion of *ʾiḥbāṭ* (disappointment - frustration), the native English speakers would note the more tense and agitated attributes of *frustration.* This was also reflected in the focus groups' narratives with the immersion learners resembling the native English speakers in their physiological references suggesting that the activated L2 is directing the learners' attention to the L2 specific emotional concept and physiological attributes of *frustration*. Meanwhile, the opposite was seen in some of the FL learners CEFR C and the majority of the FL learners CEFR B narratives who resembled the Arabic monolinguals in their use of references such as 'tired', 'laying down', and 'crying'. Such observations support Pavlenko's (2014) notion of 'feeling for speaking', where the differences in the emotional experiences between the L1 and the L2, as in the case between *frustration* and *muḥbaṭ* (disappointed - frustrated) for example, directs the language learners to speak about and interpret the psychological and physiological emotional experience differently. Results in this case suggest the L1 directing the FL learners' attention to L1 specific concepts even while speaking in the L2. This L1 effect on the L2 decreased with the increase in English language proficiency, and is non-existent among the immersion learners, where their L2 directed their attention to the L2 specific physiological emotional experience when speaking in the L1.

The notion of using the L2 concept while still being influenced by the L1 can be further explained by the thinking for speaking hypothesis (Slobin 1987; 1996; 2000; 2003; 2005) which states that the language learner can be affected by their L1 when speaking in their L2. Although Slobin's original thinking for speaking hypothesis does

not directly look into L2 learners, it has been applied to second language acquisition in recent studies (Cook & Bassetti 2010; Han & Cadierno 2010). The L1, according to the hypothesis, acts like a filter that the L2 passes through and is directed by it, leading to an output that is influenced by the L1 conceptual patterns. However, there are cases that display the opposite, that the activated language in the mind, the L2 for example, directs the attention to L2 specific conceptualizations while speaking, as in the immersion learners' narratives. Therefore, depending on the level of the language learner, they either rely on L1 conceptualizations or L2 conceptualizations to identify and talk about L2 specific concepts.

This section provided a discussion of the results, which provide answers to the research questions posed at the beginning, however the evidence and findings are subjected and affected by limitations, discussed next.

7.7: Limitations

Every study has its limitations both methodologically and in terms of interpretation of the results. There are indeed some issues that should be reconsidered should the study is ever replicated. One is the fact that there were no filler video clips for other emotions such as *sadness*, *happiness, disappointment*, *anger*, etc. which might have made the participants aware of my target and therefore affected their answers by giving me the results they think I want, even though the video clips for both *frustration* and *excitement* were played interchangeably and in a randomized order. Furthermore, because of the lack of filler video clips, another limitation might be the variety of words provided by the FL learners, which is a result of the natural tendency of speakers to avoid repetitious use of the same words. With regards to the video clips used, because the clips were not scripted, the display and range of different emotions in clips could not be controlled, and also might have had an effect on how the participants viewed the emotional experience.

Furthermore, there is always the issue of individual differences especially when it comes to dealing with emotions regardless of the differences in how each language encodes the target emotion words. Different instances can elicit different emotional reactions; even the same experiences can elicit different emotional responses and physiological reactions according to how each person evaluates the said situation. Furthermore, the number of participants specifically in the FL learners CEFR B group is considered low when compared to the rest of the focus groups, and may not be representative of their sample. The number of participants needs to be increased in future studies, and samples should be almost comparable in size. Yet another issue is the participants projecting themselves onto the person in the video clips, and instead narrating the emotional experience according to how they would feel themselves rather than narrating the emotional experience of the characters in the video clips, although care has been taken to rule out instances where participants projected themselves using the first person. Furthermore, just because differences were found in how the different language learners defined and interpreted the emotional experience of *excitement* and *frustration* both emotionally and physiologically, it cannot be assumed that they feel the emotions of *excitement* and *frustration* differently having learned an L2 concept that may be absent or different in the L1. There needs to be physiological evidence to support such findings, as it may have been due to how the emotion was taught to begin with rather than differences in feelings between the two tested languages.

Another issue is the comparison between the two learning sectors, immersion and FL learning contexts, even though measures were taken to attempt to find close comparable sets from the data in terms of proficiency for example, they remain at large incomparable. Furthermore, comparing frequencies of the emotion words in Arabic is a measure that cannot be controlled even with the use of frequency questionnaires, these Arabic emotion word frequencies remain only a sample, and a bigger corpus is needed

for further and future studies.

Furthermore, another possible limitation is that *frustration* as an emotion concept may be easier to acquire than the Russian concept of *perezhivat* for example, where CLI effects, specifically an L2 influence on the L1, in immersion classrooms in the foreign language context were not found. Therefore, further studies comparing immersion and non-immersion classrooms in the L1 speaking country need to compare more nonequivalent emotion words to further establish whether or not there is a crosslinguistic influence in the use of the English emotion word *frustration.* And finally and most importantly, although CLI effects were found in the results of both *excitement* and *frustration,* which is similar to the findings from previous research as explained in this discussion, evidence of CLI can only be assumed as there can be other factors that might have affected the results such as differences in schooling and instructional and pedagogical factors. In fact, Jarvis and Pavlenko (2010) stated that CLI is an internal phenomenon that exists in the mind of the language learner and that researchers have to remain vigilant as to what constitutes evidence of CLI (p.49). This is why the narratives were supplemented with an interview to carefully examine and clarify the use of the target emotion words and their L1 translation equivalents, since the use (or avoidance) of the target emotion words alone cannot be considered as a sign of crosslinguistic influence. For example, in the FL learners CEFR B narratives, there were instances where L2 emotion word *frustration* was used in their emotional descriptions, but rather than attributing the use of this emotion word in the narratives to an influence of the L2, further examination of its use from the interview revealed an L1 influence, as *frustration* was associated with the L1 translation equivalent *ʾiḥbāṭ* (disappointed – frustrated).

7.8: Pedagogical implications

Results from comparing two different L2 learning contexts, immersion and non-immersion provides contributions and suggestions to teaching L2 emotion words

especially in non-immersion classrooms. Firstly, because of the differences found in the use of not only the English emotion words *excitement* and *frustration*, but also in the use of the Arabic translation equivalents *mistānis* (happy), *mitḥammis* (excited), and *muḥbaṭ* (disappointed – frustrated), there needs to be an establishment of the translation equivalents available for L2 emotion words in the L1, and a discussion of the similarities and differences of the same emotional concept between the two languages. Furthermore, because the same emotion can occur in different eliciting situations, and this was considered in the study design itself, an example being *frustration* clips 2 (computer man) and 3 (girl with balloon), this should also be considered when teaching emotion words, as they should be projected in different situations and different triggers and reactions should be discussed. The students can also be asked to project their own emotional reactions and describe their own feelings in different emotional situations to further understand that psychologically we might feel the same, i.e. we do feel *excited* and *frustrated* for example, but different cultures and languages offer different conceptualizations to the 'same' emotion words. Furthermore, because of these differences in how emotions are conceptualized between languages, the nonlinguistic factors of the emotion concept such as the mental, emotional, and physiological reactions such as vocal cues, interjections, gestures, and facial expressions of the target emotion words need to be explained and compared to the nonlinguistic factors of the closest L1 translation equivalents. Additionally, the cultural and linguistic similarities and differences of not only the psychological and physiological elements of the emotion, but also the metaphorical and figurative aspects need to be explained and compared between the L1 and the L2 as well. Furthermore, because the study revealed differences between the emotional weight of the translation equivalents to the target emotion words, the degree of emotionality and affective valence, i.e. emotional weight, of the L2 emotion words should also be discussed and compared with the L1 equivalents. And finally,

should there be any grammatical and morphosyntactic differences between the emotion words in the L1 and L2, they should also be compared and put in different sentences and practiced in different contexts.

7.9: Future research

This research looked into culturally and linguistically partially equivalent and nonequivalent emotion words, and how L2 learners come to learn, identify, and use such emotion words, and what variables might have facilitated the use and identification of L2 specific emotion words. This study will be extended to further research in the future. Further work on the extensive data from the current study is planned by measuring the intonations and gestures of the participants from the elicited video narratives and interviews. Also, the language emotionality question in the questionnaire, which inquired about the participants' language emotionality ratings, will be compared against the data from the narratives and the interview. As a further expansion to the study, I plan to study other Arabic dialects as well as extending the study onto English learners of L2 Arabic, in addition to comparing a wider range of partially equivalent and nonequivalent emotion words.

Furthermore, as further research on the emotion words *excitement* and *frustration,* I plan to add a physiological point of view in addition to narrative elicitations by testing the bodily reactions when feeling *frustrated* for example and comparing L2 learners tested in both their L1 and L2 in similar *frustrating* situations while measuring the participants' emotional intensity and arousal, heart rate, body temperature, and movements. There is a device called the Q-sensor, it is a small device developed by psychological and physiological researchers at MIT that measures emotional arousal and intensity via skin conductance responses (SCRs). It is a small and compact device that may be comfortably worn around the wrist as if wearing a wristwatch. The participant can move around comfortably while taking the test, and the Q-sensor will measure their

emotional arousal without being confined to being strapped in a chair with wires and being put through a daunting laboratory experiment. For this future study, there is also a plan to obtain personal narratives from different participants reflecting on their own feelings and emotions in their L1 and L2 as opposed to the third person narratives obtained for this study. Moreover, from another physiological point of view, as a future study, gestures are an important factor to study in terms of emotional reactions, and it would be interesting to compare how different people use and read different emotional gestures, and whether or not gestures are also acquired or changed when learning an emotion word in another language. Moreover, another interesting measure to add is to have participants draw what they think the emotion of *frustration* for example and have them draw how they would feel in the same *frustrating* situations. These drawings would be analysed and comparisons of the different colours used, the strokes, and shapes would be made to measure the differences if any.

7.10: Concluding remarks

To finally conclude this study, I ask, does the learning of an emotional concept in the L2 affect the way one feels in the L1? I maintain that the emotion is still experienced even though adequate words maybe absent or different in the native tongue, nevertheless, I leave with Levinson's (2003) remark that our minds are much more remarkable than the simplicity of 'linking labels' and push for a further probe into the physiological testing of the target emotion words. Perhaps then providing evidence for or against the version of the relativity hypothesis that advocates language affects on nonlinguistic behavior.

References

Altarriba, J. (2003). Does cariño equal "liking"? A theoretical approach to conceptual nonequivalence between languages. *The International Journal of Bilingualism*, 7(3), pp.305–322.

Altarriba, J. (2006). Cognitive approaches to the study of emotion-laden and emotion words in monolingual and bilingual memory. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.232–256.

Altarriba, J. & Basnight-Brown, D.M. (2012). The acquisition of concrete, abstract, and emotion words in a second language. *International Journal of Bilingualism*, 16(4), pp.446–452.

Altarriba, J., Bauer, L.M. & Benvenuto, C. (1999). Concreteness, context-availability, and imageability ratings and words associations for abstract, concrete, and emotion words. *Behaviour Research Methods, Instruments, Computers*, 31(1), pp.578–602.

Altarriba, J. & Bauer, L.M. (2004). The distinctiveness of emotion concepts: A comparison between emotion, abstract, and concrete words. *American Journal of Psychology*, 117(1), pp.389–410.

Altarriba, J. & Canary, T.M. (2004). The influence of emotional arousal on affective priming in monolingual and bilingual speakers. *Journal of Multilingual and Multicultural Development*, 25(2), pp.248–265.

Alvarado, N. & Jameson, K.A. (2011). Shared knowledge about emotion among Vietnamese and English bilingual and monolingual speakers. *Journal of Cross-Cultural Psychology*, 42(6), pp.963–982.

Anooshian, L.J. & Hertel, P.T. (1994). Emotionality in free recall: Language specificity in bilingual memory. *Cognition and Emotion*, 8(9), pp.503–514.

Apresjan, V. (1997). Emotion metaphors and cross-linguistic conceptualization of emotions. *Cuadernos de Filologia Inglesa*, 612(1), pp.179–195.

Aristotle (2003). From Rhetoric. In R. C. Solomon, ed. *What Is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp.5–8.

Aristotle (2010). *Rhetoric.* W. D. Ross, ed., New York: Cosimo Classics.

Athanasopoulos, P. (2006). Effects of the grammatical representation of number on cognition in bilinguals. *Bilingualism: Language and Cognition*, 9(1), pp.89–96.

Athanasopoulos, P. (2007). Interaction between grammatical categories and cognition in bilinguals: The role of proficiency, cultural immersion, and language of instruction. *Language and Cognitive Processes*, 22(5), pp.689–699.

Athanasopoulos, P. (2009). Cognitive representation of colour in bilinguals: The case of Greek blues. *Bilingualism: Language and Cognition*, 12(1), pp.83–95.

Athanasopoulos, P. (2011). Cognitive restructuring in bilingualism. In A. Pavlenko, ed. *Thinking and Speaking in Two Languages*. Bristol: Multilingual Matters, pp.29–65.

Athanasopoulos, P. & Bylund, E. (2013). The "thinking" in thinking-for-speaking: Where is it? *Language, Interaction and Acquisition*, 4(1), pp.91–100.

Athanasopoulos, P. & Kasai, C. (2008). Language and thought in bilinguals: The case of grammatical number and nonverbal classification preferences. *Applied Psycholinguistics*, 29(1), pp.105–123.

Baralt, M. (2012). Coding qualitative data. In A. Mackay & S. M. Gass, eds. *Research Methods in Second Language Acquisition: A Practical Guide*. West Essex: Wiley-Blackwell, pp. 222–244.

Barrett, L.F. (2009). Variety is the spice of life: A psychological construction approach to understanding variability in emotion. *Cognition & emotion*, 23(7), pp.1284–1306.

Barrett, L.F., Mesquita, B., Ochsner, K.N. & Gross, J.J. (2007). The experience of emotion. *Annual Review of Psychology*, 58(1), pp.373–403.

Besemeres, M. (2006). Language and emotional experience: The voice of translingual memoir. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.34–58.

Besemeres, M. (2011). Emotions in bilingual life narratives. In V. Cook & B. Bassetti, eds. *Language and Bilingual Cognition*. New York: Psychology Press, pp.479–506.

Birdsong, D. (2005). Interpreting age effects in second language acquisition. In A.M.B. De Groot & J. F. Kroll, eds. *Handbook of Bilingualism: Psycholinguistic Approaches*. Oxford: Oxford University Press, pp.109–127.

Boroditsky, L. (2001). Does language shape thought?: Mandarin and English speakers' conceptions of time. *Cognitive Psychology*, 1(43), pp.1–22.

Boroditsky, L. (2010). Lost in Translation. *The Wall Street Journal*.

Boroditsky, L. (2011). How language shapes thought. *Scientific American*, pp.63–65.

Boroditsky, L., Fuhrman, O. & McCormick, K. (2011). Do English and Mandarin speakers think about time differently? *Cognition*, 118(1), pp.123–129.

Boroditsky, L., Schmidt, L.A. & Phillips, W. (2003). Sex, syntax, and semantics. In D. Gentner & S. Goldin-Meadow, eds. *Language in Mind: Advances in the Study of Language and Thought*. Massachusetts: MIT Press, pp.61–79.

Brown, P. (2011). Color me bitter: Crossmodak compounding in Tzeltal perception words. *Senses and Society*, 6(1), pp.106–116.

Brown, R.W. & Lenneberg, E.H. (1954). A study in language and cognition. *The Journal of Abnormal and Social Psychology*, 49(3), pp.454–462.

Bylund, E. & Athanasopoulos, P. (2014). Linguistic relativity in SLA: Toward a new research program. *Language Learning*, 64(4), pp.952–985.

Bylund, E. & Jarvis, S. (2011). L2 effects on L1 event conceptualization. *Bilingualism: Language and Cognition*, 14(1), pp.47–59.

Caldwell-Harris, C.L. (2014). Emotionality differences between a native and foreign language: Theoretical implications. *Frontiers in Psychology*, 5(1). Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4172089/ [Accessed November 20, 2014].

Caldwell-Harris, C.L. & Ayçiçeği-Dinn, A. (2009). Emotion and lying in a non-native language. *International Journal of Psychophysiology: Official Journal of the International Organization of Psychophysiology*, 71(3), pp.193–204.

Caldwell-Harris, C.L. & Ayçiçeği-Dinn, A. (2014). Emotional phrases don't feel as strong in a foreign language: Physiological studies. *The Psychology Journal of the University of Oslo*, 3(1), pp.108–115.

Caldwell-Harris, C.L., Tong, J., Lung, W. & Poo, S. (2011). Physiological reactivity to emotional phrases in Mandarin—English bilinguals. *International Journal of Bilingualism*, 15(3), pp.329–352.

Cannon, W.B. (2003). From Bodily Changes in Pain, Hunger, Fear, and Rage. In R.C. Solomon, ed. *What Is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp.77–83.

Casasanto, D. (2008). Who's afraid of the big bad Whorf? Crosslinguistic differences in temporal language and thought. *Language Learning*, 58(1), pp.63–79.

Chafe, W.L. (1980). *The Pear Stories: Cognitive, Cultural and Linguistic Aspects of Narrative Production*. New Jersey: Praeger.

Clarke, M. (2011). Translation and transformation: A case study from Medieval Irish and English. In K. Shields & M. Clarke, eds. *Translating Emotion: Studies in Transformation and Renewal Between Languages*. Oxford: Peter Lang.

Cook, V. (2002). Background to the L2 user. In V. Cook, ed. *Portraits of the L2 User*. Clevedon: Multilingual Matters, pp.1–28.

Cook, V. (2003). Introduction: The changing L1 in the L2 user's mind. In V. Cook, ed. *Effects of the Second Language on the First*. Clevedon: Multilingual Matters, pp. 1–18.

Cook, V. & Bassetti, B. (2010). *Language and Bilingual Cognition*. London: Psychology Press.

Damasio, A.R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Penguin.

Damasio, A.R. (2000). *The feeling of what happens: body and emotion in the making of consciousness*. New York: Harcourt Inc.

Damasio, A.R., Grabowski, T.J, Bechara, A., Damasio, H., Ponto, L.L., Parvizi, J., & Hichwa, R.D. (2000). Subcortical and cortical brain activity during the feeling of self-generated emotions. *Nature neuroscience*, 3(10), pp.1049–1056.

Darwin, C. (1998). From The Expression of the Emotions in Man and Animals. In J. M. Jenkins, K. Oatley, & N. Stein, eds. *Human Emotions: A Reader*. Massachusetts: Blackwell Publishers, pp.13–20.

Darwin, C. (2003). From The Expression of Emotion in Man and Animals. In R.C. Solomon, ed. *What is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp.57–64.

De Groot, A.M.B. (1992). Bilingual lexical representation: A closer look at conceptual representations. In R. Frost & L. Katz, eds. *Orthography, Phonology, Morphology, and Meaning*. Amsterdam: Elsevier Science Publishers, pp.389–412.

De Groot, A.M.B. (1993). Word-type effects in bilingual processing tasks: Support for a mixed representational system. In R. Schreuder & B. Weltens, eds. *The Bilingual Lexicon*. Philadelphia: John Benjamins, pp.27–51.

De Groot, A.M.B. (2002). Lexical representation and lexical processing in the L2 user. In V. Cook, ed. *Portraits of the L2 User*. Clevedon: Multilingual Matters, pp.32–63.

DeKeyser, R. & Larson-Hall, J. (2005). What does the critical period really mean? In A.M.B. De Groot & J.F. Kroll, eds. *Handbook of Bilingualism: Psycholinguistic Approaches*. Oxford: Oxford University Press, pp.88–108.

Dewaele, J.M. (2004a). Blistering barnacles! What language do multilinguals Swear in?! *Estudios de Sociolinguistica*, 5(1), pp.83–105.

Dewaele, J.M. (2004b). The emotional force of swearwords and taboo words in the speech of multilinguals. *Journal of Multilingual and Multicultural Development*, 25(2), pp.204–219.

Dewaele, J.M. (2005a). Investigating the psychological and emotional dimensions in instructed language learning: Obstacles and possibilities. *The Modern Language Journal*, 89(3), pp.367–380.

Dewaele, J.M. (2005b). The effect of type of acquisition context on perception and self-reported use of swearwords in L2, L3, L4, and L5. In A. Housen & M. Pierrard, eds. *Investigations in Instructed Second Language Acquisition*. Berlin: Mouton de Gruyter, pp.531–559.

Dewaele, J.M. (2006). Expressing anger in multiple languages. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.118–151.

Dewaele, J.M. (2008a). Dynamic emotion concepts of L2 learners and L2 users: A second language Acquisition perspective. *Bilingualism: Language and Cognition*, 11(2), pp.173–175.

Dewaele, J.M. (2008b). The emotional weight of "I love you" in multilinguals' languages. *Journal of Pragmatics*, 40(1), pp.1753–1780.

Dewaele, J.M. (2010). *Emotions in Multiple Languages*, Basingstoke: Palgrave Macmillan.

Dewaele, J.M. (2011). Self-reported use and perception of the L1 and L2 among maximally proficient bi- and multilinguals: A quantitative and qualitative investigation. *International Journal of the Sociology of Language*, 2011(208), pp.25–51.

Dewaele, J.M. & Pavlenko, A. (2001). Web questionnaire Bilingualism and Emotions.

Dewaele, J.M. & Pavlenko, A. (2002). Emotion vocabulary in interlanguage. *Language Learning*, 52(2), pp.263–322.

Dewaele, J.M. & Pavlenko, A. (2003). Productivity and lexical diversity in native and non-native speech: A study of cross-cultural effects. In V. Cook, ed. *Effects of the Second Language on the First*. Clevedon: Multilingual Matters Ltd, pp.120–141.

Dingemanse, M. & Majid, A. (2012). The semantic structure of sensory vocabulary in an African language. In N. Miyake, D. Peebles, & R.P. Cooper, eds. *CogSci 2012: Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Cognitive Science Society, pp.300–305.

Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.

Eilola, T.M., Havlenka, J. & Dinkar, S. (2007). Emotional activation in the first and second language. *Cognition and Emotion*, 21(5), pp.1064–1076.

Eilola, T.M. & Havlenka, J. (2011). Behavioral and physiological responses to the emotional and taboo Stroop tasks in native and non-native speakers of English. *International Journal of Bilingualism*, 15(3), pp.353–369.

Ekman, P. (1980). Biological and cultural contributions to body and facial movement in the expression of emotions. In A. Rorty, ed. *Explaining Emotions*. Berkley: University of California Press, pp.73–101.

Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion*, 6(3), pp.169–200.

Ekman, P. (1999). Basic Emotions. In T. Dalgleish & M. Power, eds. *Handbook of Cognition and Emotion*. Sussex: John Wiley & Sons, Ltd. pp.45-60.

Ekman, P. (2003). From Biological and Cultural Contributions to Body and Facial Movement in the Expression of Emotions. In R.C. Solomon, ed. *What Is an Emotion? Classic and Contemporary Readings*. Oxford: Oxford University Press, pp.119–124.

Ekman, P. (2004a). Emotional and conversational nonverbal signals. In J. M. Larrazabal & L. A. P. Miranda, eds. *Language, Knowledge, and Representation*. Philosophical Studies Series. Netherlands: Springer, pp.39–50.

Ekman, P. (2004b). *Emotions Revealed: Understanding Faces and Feelings*. London: Phoenix.

Ekman, P. & Friesen, W.V. (1969). The repertoire of non-verbal behaviour: Categories, origins, usage, and coding. *Semiotica*, 1(1), pp.49–98.

Ekman, P. & Friesen, W.V. (1971). Constants across culture in the face and emotion. *Journal of Personality and Social Psychology*, 17(1), pp.124–129.

Ekman, P. & Friesen, W.V. (2003). *Unmasking the face: A guide to recognizing emotions from facial clues*, Massachusetts: Malor Books.

Ellis, N.C. & Beaton, A. (1993). Psycholinguistic determinants of foreign language vocabulary learning. *Language Learning*, 43(4), pp.559–617.

Evans, N. & Levinson, S.C. (2009). The myth of language universals: Language diversity and its importance for cognitive science. *Behavioral and Brain Sciences*, 32(5), pp.429–448.

Fortenbaugh, W.W. (2002). *Aristotle on Emotion*. London: Duckworth.

Frijda, N.H. & Mesquita, B. (2001). The social roles and functions of emotions. In G.W. Parrott, ed. *Emotion and Culture: Empirical studies of mutual influence*. Philadelphia: Psychology Press, pp.51–87.

Gass, S.M. & Selinker, L. (1992). Introduction. In S.M. Gass & L. Selinker, eds. *Language Transfer in Language Learning*. Philadelphia: John Benjamins Publishing, pp.1–15.

Gentner, D. & Goldin-Meadow, S. (2003). Introduction: Whither Whorf. In D. Gentner & S. Goldin-Meadow, eds. *Language in mind: Advances in the study of language and thought*. Massachusetts: MIT Press, pp. 3–14.

Glass, G.V., Peckham, P.D. & Sanders, J.R. (1972). Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance. *Review of Educational Research*, 42(3), pp.237–288.

Grabois, H. (1999). The convergence of sociocultural theory and cognitive linguistics: Lexical semantics and the L2 acquisition of love, fear and happiness. In G. Palmer & D. Occhi, eds. *Languages of Sentiment: Cultural Constructions of Emotional Subtrates*. Amsterdam: John Benjamins Pub Co, pp.201–233.

Green, D.W. (2011). Bilingual worlds. In V. Cook & B. Bassetti, eds. *Language and Bilingual Cognition*. New York: Psychology Press, pp.229–240.

Grosjean, F. (1982). *Life with Two Languages: An Introduction to Bilingualism*, Massachusetts: Harvard University Press.

Grosjean, F. (2001). The bilingual's language modes. In J.L. Nicol, ed. *One Mind, Two Languages: Bilingual Language Processing*. Massachusetts: John Wiley & Sons, pp.1–22.

Grosjean, F. (2004). Studying bilinguals: Methodological and conceptual issues. In T.K. Bhatia & W.C. Ritchie, eds. *The Handbook of Bilingualism*. Massachusetts: Blackwell Publishing Ltd, pp.32–64.

Grosjean, F. & Li, P. (2013). *The Psycholinguistics of Bilingualism*. New Jersey: John Wiley & Sons.

Gumperz, J.J. & Levinson, S.C. (1996). *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press.

Haidt, J. & Keltner, D. (1999). Culture and facial expression: Open ended methods find more faces and a gradient of universality. *Cognition and Emotion*, 13(1), pp.225–266.

Han, Z. & Cadierno, T. (2010). *Linguistic Relativity in SLA: Thinking for Speaking*, Bristol: Multilingual Matters.

Harkins, J. & Wierzbicka, A. (2001). *Emotions in Crosslinguistic Perspective (Cognitive Linguistics Research)*. Berlin: Mouton de Gruyter.

Harré, R. (1986). *The Social Construction of Emotions*. Oxford: Blackwell.

Harris, C.L. (2004). Bilingual speakers in the lab: Psychophysiological measures of emotional reactivity. *Journal of Multilingual and Multicultural Development*, 25(2), pp.223–247.

Harris, C.L., Ayçiçegi, A. & Gleason, J. (2003). Taboo words and reprimands elicit greater autonomic reactivity in a first language than in a second language. *Applied Psycholinguistics*, 24(4), pp.561–579.

Harris, C.L., Ayçiçegi, A. & Gleason, J. (2006). When is a first language more emotional?: Psychophysiological evidence from bilingual speakers. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.257–283.

Harwell, M.R., Rubinstein, E.N, Hayes, W.S. & Olds, C.C. (1992). Summarizing Monte Carlo results in methodological research: The one- and two-factor fixed effects ANOVA cases. *Journal of Educational and Behavioral Statistics*, 17(4), pp.315–339.

Holes, C. (2011). Kuwaiti Arabic. In L. Edzard, & R. de Jong, eds. *Encyclopaedia of Arabic Language and Linguistics*, Online Edition. Available at: <http://dx.doi.org/10.1163/1570-6699_eall_EALL_COM_vol2_0078> [Accessed March 15, 2017].

Humboldt, W.V. (1999). *Humboldt: On Language: On the Diversity of Human Language Construction and its Influence on the Mental Development of the Human Species*. M. Losonsky, ed., Cambridge: Cambridge University Press.

Izard, C.E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, 2(3), pp.260–280.

James, W. (1884). What is an emotion? *Mind*, 9(34), pp.188–205.

Jarvis, S. (2000a). Methodological rigor in the study of transfer: Identifying L1 influence in the interlanguage lexicon. *Language Learning*, 50(2), pp.245–309.

Jarvis, S. (2000b). Semantic and conceptual transfer. *Bilingualism: Language and Cognition*, 3(1), pp.19–21.

Jarvis, S. (2002). Short texts, best fitting curves, and new measures of lexical diversity. *Language Testing*, 19(1), pp.57–84.

Jarvis, S. (2009). Lexical transfer. In A. Pavlenko, ed. *The Bilingual Mental Lexicon: Interdisciplinary Approaches*. Bristol: Multilingual Matters, pp.99–124.

Jarvis, S. (2011). Conceptual transfer: Crosslinguistic effects in categorization and construal. *Bilingualism: Language and Cognition*, 14(1), pp.1–8.

Jarvis, S. (2012). Crosslinguistic influence and multilingualism. In C. A. Chapelle, ed. *The Encyclopedia of Applied Linguistics*. Boston: Wiley-Blackwell, pp.1–8.

Jarvis, S. (2016). Clarifying the scope of conceptual transfer. *Language Learning*, 66(3), pp.608–635.

Jarvis, S. & Pavlenko, A. (2010). *Crosslinguistic Influence in Language and Cognition*, London: Routledge.

Javier, R.A. (2010). *The Bilingual Mind: Thinking, Feeling and Speaking in Two Languages*, New York: Springer.

Jenkins, J.M., Oatley, K. & Stein, N.L. (1998). *Human emotions: A reader*. Malden: Blackwell.

Jiang, N. (2000). Lexical representation and development in a second language. *Applied Linguistics*, 21(1), pp.47–77.

Jiang, N. (2002). Form-meaning mapping in vocabulary acquisition in a second language. *Studies in Second Language Acquisition*, 24(1), pp.617–637.

Jiang, N. (2004). Semantic transfer and its implications for vocabulary teaching in a second language. *The Modern Language Journal*, 88(3), pp.416–432.

Johnson, J.S. & Newport, E.L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21(1), pp.60–99.

Kellerman, E. (1995). Crosslinguistic influence: Transfer to nowhere? *Annual Review of Applied Linguistics*, 15(1), pp.125–150.

Keltner, D. & Haidt, J. (1999). Social functions of emotions: Four levels of analysis. *Cognition and Emotion*, 13(5), pp.505–521.

Kinsella, J. (2011). East meets West: Some Portuguese translations of Eastern poetry. In K. Shields & M. Clarke, eds. *Translating Emotion: Studies in Transformation and Renewal Between Languages*. Oxford: Peter Lang.

Kitayama, S. & Markus, H.R. (1994). Introduction to cultural psychology and emotion research. In S. Kitayama & H. R. Markus, eds. *Emotion and Culture: Empirical studies of Mutual Influence*. Washington: American Psychological Association.

Kövecses, Z. (2003). *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*. Cambridge: Cambridge University Press.

Kövecses, Z. (2012). *Emotion Concepts*. New York: Springer.

Koven, M. (2006). Feeling in two languages: A comparative analysis of a bilingual's affective displays in French and Portuguese. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.84–117.

Kroll, J.F. (1993). Accessing conceptual representations for words in a second language. In R. Schreuder & B. Weltens, eds. *The Bilingual Lexicon*. Amsterdam: John Benjamins, pp.53–81.

Kroll, J.F. & De Groot, A.M.B. (1997). Lexical and conceptual memory in the bilingual: Mapping form to meaning in two languages. In *Tutorials in Bilingualism: Psycholinguistic Perspectives*. New Jersey: Lawrence Erlbaum Associates, pp. 169–199.

Kroll, J.F. & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations. *Journal of Memory and Language*, 33(2), pp.149–174.

Kroll, J.F. & Tokowicz, N. (2005). Models of bilingual representation and processing: Looking back and to the future. In J.F. Kroll & A.M.B. De Groot, eds. *Handbook of Bilingualism: Psycholinguistic Approaches*. Oxford: Oxford University Press, pp.531–553.

Kroll, J.F., Van Hell, J.G., Tokowicz, N. & Green, D.W. (2010). The Revised Hierarchical Model: A critical review and assessment. *Bilingualism*, 13(3), pp.373–381.

Kuppens, P., Van Mechelen, I., Smits, D. J. M., De Boeck, P., & Ceulemans, E. (2007). Individual differences in patterns of appraisal and anger experience. *Cognition and Emotion*, 21, pp.689–713.

Kuppens, P., Stouten, J., & Mesquita, B. (2009). Individual differences in emotion components and dynamics: Introduction to the Special Issue. *Cognition & Emotion*, *23*(7), pp.1249–1258.

Kuppens, P., & Tong, E. M.W. (2010). An Appraisal Account of Individual Differences in Emotional Experience. *Social and Personality Psychology Compass*, *4*(12), pp.1138–1150.

Labov, W. & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm, ed. *Essays on the verbal and visual arts: Proceedings of the 1966 annual Spring meeting of the American Ethnological Society*. Seattle: University of Washington Press, pp.12–44.

Lakoff, G. (1990). *Women, Fire and Dangerous Things: What Categories Reveal About the Mind*. Chicago: University of Chicago Press.

Larson-Hall, J. (2010). *A Guide to Doing Statistics in Second Language Research Using SPSS*. New York: Routledge.

Larson-Hall, J. (2012). How to run statistical analysis. In A. Mackey & S. M. Gass, eds. *Research Methods in Second Language Acquisition: A Practical Guide*. Chichester: Wiley-Blackwell, pp.245–274.

Lazarus, R.S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.

LeDoux, J.E. (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*, New York: Simon & Schuster.

LeDoux, J.E. (2003). The emotional brain, fear, and the amygdala. *Cellular and Molecular Neurobiology*, 23(4–5), pp.727–738.

Lee, P. (1997). Language in thinking and learning: Pedagogy and the new Whorfian framework. *Harvard Educational Review*, 67(3), pp.430–471.

Lenneberg, E.H. (1967). *Biological Foundations of Language*. New York: John Wiley & Sons.

Levenson, R.W., Ekman, P. & Friesen, W.V. (1990). Voluntary facial action generates emotion-specific autonomic nervous system activity. *Psychophysiology*, 27(4), pp.363–384.

Levinson, S.C. (2003). Language and mind: Let's get the issues straight! In D. Gentner & S. Goldin-Meadow, eds. *Language in mind: Advances in the study of language and thought*. Massachusetts: MIT Press, pp.25–46.

Levinson, S.C., Kita, S. & Haun, D. (2002). Returning the tables: Language affects spatial reasoning. *Cognition*, 1(84), pp.155–188.

Lix, L.M., Keselman, J.C. & Keselman, H.J. (1996). Consequences of assumption violations revisited: A quantitative review of alternatives to the one-way analysis of variance "f" test. *Review of Educational Research*, 66(4), pp.579–619.

Lucy, J.A. (1992). *Language Diversity and Thought: A Reformulation of the Linguistic Relativity Hypothesis*. Cambridge: Cambridge University Press.

Lucy, J.A. (1996). *Grammatical Categories and Cognition: A Case Study of the Linguistic Relativity Hypothesis*. Cambridge: Cambridge University Press.

Lucy, J.A. (1997). Linguistic relativity. *Annual Review of Anthropology*, 26(1), pp.291–312.

Lutz, C. (2003). From Unnatural Emotions. In R.C. Solomon, ed. *What is an Emotion?: Classic and contemporary readings*. New York: Oxford University Press, pp. 142–151.

Majid, A. & Levinson, S.C. (2011). The senses in language and culture. *Senses and Society*, 6(1), pp.5–18.

Marian, V. & Kaushanskaya, M. (2008). Words, feelings, and bilingualism: Cross-linguistic differences in emotionality of autobiographical memories. *The Mental Lexicon*, 3(1), pp.72–90.

Marks, J. (1995). Emotions in Western thought: some background for a comparative dialogue. In J. Marks, R.T. Ames, & R.C. Solomon, eds. *Emotions in Asian Thought: A Dialogue in Comparative Philosophy*. New York: State University of New York Press, pp.1–38.

Markus, H.R. & Kitayama, S. (2001). The cultural construction of self and emotion: Implications for social behavior. In G.W. Parrott, ed. *Emotions in Social Psychology: Essential Readings*. New York: Psychology Press, pp.119–137.

Mcdonald, J.H. (2014). *Handbook of Biological Statistics*. Baltimore: Sparky House Publishing.

Mikołajczyk, A. (1998). The metonymic and metaphorical conceptualisation of anger in Polish. In A. Athanasiadou & E. Tabakowska, eds. *Speaking of Emotions: Conceptualisation and Expression*. Berlin: Mouton de Gruyter, pp.153–190.

Niedenthal, P.M., Krauth-Gruber, S. & Ric, F. (2006). *Psychology of Emotion: Interpersonal, Experiential, and Cognitive Approaches*. New York: Psychology Press.

Nussbaum, M. (2003). Emotions as judgments of value and importance. In R.C. Solomon, ed. *What is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp.271–283.

Oatley, K., Keltner, D. & Jenkins, J.M. (2006). *Understanding Emotions*. New Jersey: John Wiley & Sons.

Odlin, T. (2005). Crosslinguistic influence and conceptual transfer: What are the concepts? *Annual Review of Applied Linguistics*, 25(1), pp.3–25.

Odlin, T. (2010). Conclusion: On the interdependence of conceptual transfer and relativity studies. In Z. Han & T. Cadierno, eds. *Linguistic Relativity in SLA: Thinking for Speaking*. Bristol: Multilingual Matters, pp.183–194.

Ortony, A., Clore, G.L. & Collins, A. (1990). *The Cognitive Structure of Emotions*. Cambridge: Cambridge University Press.

Ortony, A. & Turner, T.J. (1990). What's basic about basic emotions? *Psychological review*, 97(3), pp.315–331.

Panayiotou, A. (2001). *The Other within the Self: Bilinguals and the construction of emotions*. Unpublished PhD manuscript. Graduate School of Education, Harvard University.

Panayiotou, A. (2004a). Bilingual emotions: The untranslatable self. *Estudios de Sociolinguistica*, 5(1), pp.1–19.

Panayiotou, A. (2004b). Switching codes, switching code: Bilinguals' emotional responses in English and Greek. *Journal of Multilingual and Multicultural Development*, 25(2), pp.124–139.

Panayiotou, A. (2006). Translating guilt: An endeavor of shame. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp.183–208.

Parrott, G.W. (2001). *Emotions in Social Psychology: Essential Readings*. Philadelphia: Psychology Press.

Parrott, G.W. & Harré, R. (1996). Introduction: Some complexities in the study of emotions. In *The Emotions: Social, Cultural and Biological Dimensions*. London: Sage Publications, pp.1–20.

Pavlenko, A. (1999). New approaches to concepts in bilingual memory. *Bilingualism: Language and Cognition*, 2(3), pp.209–230.

Pavlenko, A. (2000a). New approaches to concepts in bilingual memory. *Bilingualism: Language and Cognition*, 3(1), pp.1–4.

Pavlenko, A. (2000b). What's in a concept? *Bilingualism: Language and Cognition*, 3(1), pp.1–36.

Pavlenko, A. (2002a). Bilingualism and emotions. *Multilingua*, 21(1), pp.45–78.

Pavlenko, A. (2002b). Emotions and the body in Russian and English. *Pragmatics and Cognition*, 10(1), pp.207–241.

Pavlenko, A. (2003a). Eyewitness memory in late bilinguals: Evidence for discursive relativity. *International Journal of Bilingualism*, 7(3), pp.257–281.

Pavlenko, A. (2003b). "I feel clumsy speaking Russian": L2 influence on L1 in narratives of Russian L2 users of English. In V. Cook, ed. *Effects of the Second Language on the First*. Clevedon: Multilingual Matters Ltd, pp.32–61.

Pavlenko, A. (2005). *Emotions and Multilingualism*. New York: Cambridge University Press.

Pavlenko, A. (2006). Bilingual selves. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp. 1–33.

Pavlenko, A. (2008a). Bi- and multilingualism as a metaphor for research. *Bilingualism: Language and Cognition*, 11(2), pp.197–201.

Pavlenko, A. (2008b). Emotion and emotion-laden words in the bilingual lexicon. *Bilingualism: Language and Cognition*, 11(2), pp.147–164.

Pavlenko, A. (2008c). Narrative analysis. In L. Wei & M. G. Moyer, eds. *The Blackwell Guide to Research Methods in Bilingualism and Multilingualism*. Massachusetts: Blackwell Publishing, pp.311–325.

Pavlenko, A. (2008d). Structural and conceptual equivalence in the acquisition and use of emotion words in a second language. *The Mental Lexicon*, 3(1), pp.91–120.

Pavlenko, A. (2009). Conceptual Representation in the bilingual lexicon and second language vocabulary learning. In A. Pavlenko, ed. *The Bilingual Mental Lexicon: Interdisciplinary Approaches*. Bristol: Multilingual Matters, pp.125–160.

Pavlenko, A. (2011a). Introduction: Bilingualism and thought in the 20th century. In A. Pavlenko, ed. *Thinking and Speaking in Two Languages*. Bristol: Multilingual Matters, pp.1–28.

Pavlenko, A. (2011b). (re-)naming the world: Word-to-referent mapping in second language speakers. In A. Pavlenko, ed. *Thinking and Speaking in Two Languages*. Bristol: Multilingual Matters, pp.198–236.

Pavlenko, A. (2011c). Thinking and speaking in two languages: Overview of the field. In A. Pavlenko, ed. *Thinking and Speaking in Two Languages*. Bristol: Multilingual Matters, pp.237–257.

Pavlenko, A. (2014). *The Bilingual Mind: And What It Tells Us about Language and Thought*. New York: Cambridge University Press.

Pavlenko, A. (2016). Whorf's lost argument: Multilingual awareness. *Language Learning*, 66(3), pp.581–607.

Pavlenko, A. & Driagina, V. (2007). Russian emotion vocabulary in American learners' narratives. *The Modern Language Journal*, 91(2), pp.213–234.

Pavlenko, A. & Jarvis, S. (2002). Bidirectional transfer. *Applied Linguistics*, 23(2), pp.190–214.

Piaget, J. (1959). *The Language and Thought of the Child*. Hove: Psychology Press.

Pinker, S. (1994). *The Language Instinct: The New Science of Language and Mind*. London: Penguin.

Pinker, S. (1997). *How the Mind Works*. London: Penguin.

Pinker, S. (2003). *The Blank Slate: The Modern Denial of Human Nature*. London: Penguin.

Pinker, S. (2008). *The Stuff of Thought: Language as a Window into Human Nature*. London: Penguin.

Quick Placement Test (2001). *Oxford Quick Placement Test QPT*. Oxford: Oxford University Press.

Rintell, E. (1984). But how did you feel about that? The learner's perception of emotion in speech. *Applied Linguistics*, 5(3), pp.225–264.

Russell, J.A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6), pp.1161–1178.

Russell, J.A. (1991). Culture and the categorization of emotions. *Psychological Bulletin*, 110(3), pp.426–450.

Russell, J.A. (1994). Is there universal recognition of emotion from facial expression? A

review of the cross-cultural studies. *Psychological Bulletin*, *115*(1), pp.102–141.

Russell, J.A. (2009). Emotion, core affect, and psychological construction. *Cognition & Emotion*, *23*(7), pp.1259–1283.

Russell, J.A., & Widen, S.C. (2002). A Label Superiority Effect in Children's Categorization of Facial Expressions. *Social Development*, *11*(1), pp.30–52.

Sander, D. & Scherer, K.R. (2009). *The Oxford Companion to Emotion and the Affective Sciences*. New York: Oxford University Press.

Sapir, E. (1949). *Selected Writings of Edward Sapir in Language, Culture and Personality* D. G. Mandelbaum, ed., Berkeley: University of California Press.

Schachter, S. & Singer, J.E. (2003). From Cognitive, Social, and Physiological Determinants of Emotional State. In R.C. Solomon, ed. *What is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp. 110–118.

Scherer, K.R. (2005). What are emotions? And how can they be measured? *Social Science Information*, *44*(4), pp.695–729.

Scherer, K.R. (2009a). Emotions are emergent processes: they require a dynamic computational architecture. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 364(1535), pp.3459–3474.

Scherer, K.R. (2009b). The dynamic architecture of emotion: Evidence for the component process model. *Cognition & Emotion*, *23*(7), pp.1307–1351.

Scherer, K.R. & Wallbott, H.G. (1994). Evidence for universality and cultural variation of differential emotion response patterning. *Journal of Personality and Social Psychology*, 66(2), pp.310–328.

Singleton, D. (2003). Critical Period or general age factor(s)? In M. P. García Mayo & M. L. García Lecumberri, eds. *Age and the Acquisition of English as a Foreign Language*. Clevedon: Multilingual Matters, pp.3–22.

Singleton, D. (2005). The Critical Period Hypothesis: A coat of many colours. *International Review of Applied Linguistics in Language Teaching*, 43(4), pp.269–285.

Slobin, D.I. (1987). Thinking for speaking. In J. Aske et al., eds. *Proceedings of the 13th Annual Meeting of the Berkeley Linguistic Society*. Berkeley: Berkeley Linguistic Society, pp.435–445.

Slobin, D.I. (1996). From “thought and language” to “thinking for speaking.” In J.J. Gumperz & S. C. Levinson, eds. *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press, pp.70–96.

Slobin, D.I. (2000). Verbalized events: A dynamic approach to linguistic relativity and determinism. In S. Niemeier & R. Dirven, eds. *Evidence for Linguistic Relativity*. Philadelphia: John Benjamins Publishing, pp.107–138.

Slobin, D.I. (2003). Language and Thought Online: Cognitive Consequences of Linguistic Relativity. In D. Gentner & S. Goldin-Meadow, eds. *Language in mind: Advances in the study of language and thought*. Massachusetts: MIT Press, pp.157–192.

Slobin, D.I. (2005). Relating narrative events in translation. In D. D. Ravid & H. B. Shyldkrot, eds. *Perspectives on Language and Language Development: Essays in Honor of Ruth A. Berman*. New York: Kluwer Academic Publishers, pp.115–129.

Solomon, R.C. (1993). *The Passions: Emotions and the Meaning of Life*. Indianapolis: Hackett Pub. Co.

Solomon, R.C. (2003). From Emotions and Choice. In R. C. Solomon, ed. *What Is an Emotion?: Classic and Contemporary Readings*. New York: Oxford University Press, pp. 224–235.

Stepanova, O. & Coley, J.D. (2002). The green-eyed monster: Concepts of envy and jealousy in Russian and English. *Journal of Cognition and Culture*, 2(1), pp.235–262.

Stepanova Sachs, O. & Coley, J.D. (2006). Envy and jealousy in Russian and English: Labeling and conceptualization of emotions by monolinguals and bilinguals. In A. Pavlenko, ed. *Bilingual Minds: Emotional Experience, Expression, and Representation*. Clevedon: Multilingual Matters, pp. 209–231.

Stevenson, A. ed. (2010). *Oxford Dictionary of English*, 3rd ed. Oxford: Oxford University Press.

Sutton, T.M., Altarriba, J.L., Gianico, J.L. & Basnight-Brown, D.M. (2007). The automatic access of emotion: Emotional stroop effects in Spanish-English bilingual speakers. *Cognition and Emotion*, 25(5), pp.1077–1090.

Taylor, J.R. & Mbense, T.G. (1998). Red dogs and rotten mealies: How Zulus talk about anger. In A. Athanasiadou & E. Tabakowska, eds. *Speaking of Emotions: Conceptualisation and Expression*. Berlin: Mouton de Gruyter, pp.191–226.

Thagard, P. & Aubie, B. (2008). Emotional consciousness: A neural model of how cognitive appraisal and somatic perception interact to produce qualitative experience. *Consciousness and Cognition*, 17(1), pp.811–834.

Whorf, B.L. (1956). *Language, Thought and Reality: Selected Writings*. Massachusetts: MIT Press.

Wierzbicka, A. (1985). Different cultures, different languages, different speech acts: Polish vs. English. *Journal of Pragmatics*, 9(2), pp.145–178.

Wierzbicka, A. (1986a). Does language reflect culture? Evidence from Australian English. *Language in Society*, 15(3), pp.349–373.

Wierzbicka, A. (1986b). Human emotions: Universal or culture-specific? *American Anthropologist*, 88(3), pp.584–594.

Wierzbicka, A. (1988). Emotions across culture: Similarities and differences. *American Anthropologist*, 90(4), pp.982–983.

Wierzbicka, A. (1992a). Defining emotion concepts. *Cognitive Science*, 16(1), pp.539–581.

Wierzbicka, A. (1992b). *Semantics, Culture, and Cognition: Universal Human Concepts in Culture-specific Configurations*. New York: Oxford University Press.

Wierzbicka, A. (1994). Emotion, language, and cultural scripts. In S. Kitayama & H.R. Markus, eds. *Emotion and Culture: Empirical Studies of Mutual Influence*. Washington: American Psychological Association, pp.133–196.

Wierzbicka, A. (1998a). Russian emotional expression. *Ethos*, 26(4), pp.456–483.

Wierzbicka, A. (1998b). "Sadness" and "anger" in Russian: The non-universality of the so-called "basic human emotions." In A. Athanasiadou & E. Tabakowska, eds. *Speaking of Emotions: Conceptualisation and Expression*. Berlin: Mouton de Gruyter, pp.3–28.

Wierzbicka, A. (1999). *Emotions across Languages and Cultures: Diversity and Universals*, Massachusetts: Cambridge University Press.

Wierzbicka, A. (2004). Preface: Bilingual lives, bilingual experience. *Journal of Multilingual and Multicultural Development*, 25(2), pp.94–104.

Ye, Z. (2001). An inquiry into "sadness" in Chinese. In J. Harkins & A. Wierzbicka, eds. *Emotions in Crosslinguistic Perspective*. Berlin: Mouton de Gruyter, pp. 359–403.

Yee Ho, J.W. (2009). The language of anger in Chinese and English narratives. *International Journal of Bilingualism*, 13(4), pp.481–500.

Appendix A1: L2 Learners Questionnaire

Please Answer the Following Questions as Best as Possible:

1. Name: ----------
2. Age: ----------
3. Gender:
    a) Male
    b) Female
4. Highest/Current Education Level:
    a) BA
    b) MA
5. Do you consider yourself bilingual? (equal in your two languages)
    a) Yes
    b) No
6. At what age did you start learning your second language (English)?: ----------
7. How did you learn your second language (English)? (choose the correct answer)
    a) Naturally (lived in an English speaking country)
    b) Classroom (lived in Kuwait, but learned English in school)
    c) Mixed (a combination of both)
8. If you had learned your second language (English) in a formal classroom environment. Which kind of school did you go to? (choose the correct answer)
    a) Private
    b) Public (Government)
9. Which language do you consider yourself more dominant in?
    a) Arabic
    b) English
    c) Both

10. On a scale of 1 to 5 rate the following: (5 being the highest, 1 being the lowest)

    Key: (5= Highly Proficient, 4= Proficient, 3= Somewhat Proficient, 2= Least Proficient, 1= Not Proficient)

    a) Your Arabic Proficiency: understanding----reading----writing----speaking----

    b) Your English Proficiency: understanding----reading----writing----speaking----

11. On a scale of 1 to 5 rate the following: (5 being the highest, 1 being the lowest)

    Key: (5= All the Time, 4= Frequently, 3= Sometimes, 2= Rarely, 1= Never)

    a) Your frequency of use of Arabic: --------- with whom?:----------

    b) Your frequency of use of English: --------- with whom?:----------

12. Arabic is emotional: (Circle the correct answer)

    Not at all Somewhat More or less To a large extent Absolutely

13. English is emotional: (Circle the correct answer)

    Not at all Somewhat More or less To a large extent Absolutely

Thank you

Appendix A2: English Native Speakers Questionnaire

Please Answer the Following Questions as Best as Possible:

1. Name: ----------
2. Age: ----------
3. Gender:
    a) Male
    b) Female
4. Highest/Current Education Level:
    a) BA
    b) MA
5. Do you speak any language(s) other than English? (if not, skip to Question 8)
    a) Yes. What are they? ----------
    b) No
6. How long have you been learning your second language? ----------
7. Please rate your proficiency level in your second language? (5 being the highest, 1 being the lowest)

    Key: (5= Highly Proficient, 4= Proficient, 3= Somewhat Proficient, 2= Least Proficient, 1= Not Proficient)

a) Understanding --------
b) Reading -------
c) Writing -------
d) Speaking -------

Thank you

Appendix A3: Arabic Monolinguals Questionnaire

الرجاء الاجابة على الاسئلة التالية:

الاسم: ----------

العمر:

الجنس:

اعلى مرحلة دراسية:

هل تتكلم/تتكلمين لغات اخرى غير العربية: ----------

ما هي: و متى بدأت بتعلمها:

شكرا

Appendix B1: L2 Learners call for participants

Dear student,

I, like you are now, sat in those very chairs, in those same classrooms, and was taught by the same Lecturers and professors. I loved every moment of it, and decided that this is what I wanted to do. One day, you may, like me, want to be standing where these teachers are. I had a dream and worked hard to get where I am now, and still have a long way to go. Dear student, I am now at a place where I need your kind help to aid me with my research. I am a PhD student currently studying in London at SOAS University. What I am looking into is the marvel that is the human mind and how we learn languages and map different concepts into our minds. I focus on the learning of the language of emotions where a single word salient equivalent may not be available in the first language. If you would kindly like to help in my research, this is what you will be expected to do during the test:
You are to view a series of short silent clips and are to retell the story once in English, and again in Arabic (or the other way around). You will be filmed during the narrative elicitation test to see any patterns in your language, tone, and body language. A short interview regarding the narratives will conclude the study. This test should only take an hour of your time.
You will also need to complete a standardized English Proficiency test to help me compare different groups. You may need to come in on a separate day to complete this test.
Rest assured, these videos will only be seen by me, no one will ever look at them, I will use these recorded videos to analyse your language, tone, body language, etc., and then destroy them.

Testing will begin Sunday February 10 extending all the way into March. I need a very large group of participants, at least 100, so your help is greatly appreciated.

If you are interested in participating, or have any questions and inquiries, please contact me as soon as possible. You can reach me at:

Email: 554397@soas.co.uk

Many thanks in advance
Kindest regards
Saba Tifooni

Appendix B2: English native speakers call for participants

Dear student,

My name is Saba Tifooni and I am on my 2nd year PhD in Linguistics. What I am looking into is the marvel that is the human mind and how we learn languages and map different concepts into our minds. I focus on the learning of the language of emotions in the second language where a single word salient equivalent may not be available in the first language. I am now at a place where I need your kind help to aid me with my research. I am in need of participants who are Native Speakers of English. I realize that we are approaching exam period, therefore, there will be a 5£ incentive should you wish to participate.
If you would kindly like to help in my research, this is what you will be expected to do during the test:
You are to view a series of short silent clips (each under a minute long) and are to retell the story after each clip. You will be filmed during the test to see any patterns in your language, tone, and body language. A short interview regarding the narratives will conclude the study. This test should only take a half hour of your time.
Rest assured, these videos will only be seen by me, no one will ever look at them, I will use them to analyse your language and then destroy them.

If you are interested in participating, or have any questions and inquiries, please contact me as soon as possible to schedule a time and date that would be suitable for you. You can reach me at:

Email: 554397@soas.co.uk

Your help is greatly appreciated.

Many thanks in advance
Kindest regards
Saba Tifooni

Appendix C: Video clips

First accessed January 2013 – Last accessed October 2015

Links for the video clips chosen for the current study (Some were slightly edited to accommodate the study) – Please refer to the attached CD/DVD for the video clips

Excitement:

Clip 1: Excited Kid in Chicago O'Hare Airport

Link: https://www.youtube.com/watch?v=XOi2TTpJx1I

(edited with an inserted explanation that this child is about to fly on a plane for the first time)

Clip 2: An excited boy just lets go of the fishing pole.

Link: https://www.youtube.com/watch?v=vHURayR-4oQ

(written text at the beginning is deleted)

Clip 3: CuteWinFail: Excited Birthday Boy

Link: https://www.youtube.com/watch?v=IWCsVrZW5v4

Clip 4: To[o] Excited To Sleep

Link: https://www.youtube.com/watch?v=b95oyhSd5ls

Clip 5: Thomas the Train Kid

Link: https://www.youtube.com/watch?v=BORW7KACuPY

Frustration:

Clip 1: ANIM713 - Drawing in Motion – Frustration

Link: https://www.youtube.com/watch?v=eFOF_ta_TRE

Clip 2: computer frustration!!!

Link: https://www.youtube.com/watch?v=otiMil1kt1Y

Clip 3: frustrated girl

http://www.youtube.com/watch?v=lJS8Cm6_YSY

(shortened) – Video no longer available when accessed on October 2015

Clip 4: frustrated boy

https://www.youtube.com/watch?v=o5zas1fepOo

(shortened)

Clip 5: Shampoo Prank Original

Link: https://www.youtube.com/watch?v=6PKQE8FM2Uw

(shortened)

Appendix D: Interview Questions

1. Why did you choose the word (*frustration/excitement* – or chosen word) for this clip?
2. What does *frustration/excitement* entail to you mentally and emotionally? How do you feel inside? What goes through your mind?
3. What does *frustration/excitement* entail to you physically? How do you feel in your body? What happens to you physically?
4. Would *frustration/excitement* be a suitable word to describe this clip?
5. How would you define *frustration/excitement* in English?
6. Can you give an Arabic (Kuwaiti) word translation of *frustration/excitement*?
7. Is it the same meaning to you as it is in English? Does it carry the same force? Does it carry the same emotional effect? Is it the same emotional weight?
8. Where did you learn *frustration/excitement*? Do you remember what year?
9. At what age approximately did you start using *frustration/excitement* in your daily life?
10. How often do you use *frustration/excitement*?
11. What situations would you feel *frustration/excitement* in?
12. What happens to you when you feel *frustration/excitement*?
13. Is there a difference between *anger* and *frustration*? Please explain your answer?
14. Is there a difference between *happiness* and *excitement*? Please explain your answer?

Appendix E1: Examples from the *excitement* narratives

English *excitement* Clip 1:

English native speaker:

so there's a small boy . . . about 7 or 8 maybe 9 . . . he was looking out a glass window at a plane and jumping up and waving his arms about really really excited because it's the first time he's seen a plane that close and he knows he'd be getting on it

Immersion learner:

it was the first flight for the child and so when he saw the plane he got very excited . . . he started jumping up and down and waving his arms about . . . he seemed pretty excited to get on the plane for the first time

FL learner CEFR C:

a little boy about to fly for the first time . . . he's at the plane gate right before they board the plane . . . he was jumping out of happiness and excitement

FL learner CEFR B:

there's a child in the airport . . . he seems very happy that he's jumping and running and turning around in the hallway in the airport . . . he saw the airplane so he was very excited to be flying on it

English *excitement* Clip 2:

English native speaker:

a little boy and girl with their dad trying to catch a fish . . . and they got a fish at the end of a hook . . . and they're trying to reel it in . . . their dad steps in to help and they all seemed quite excited by this

Immersion learner:

the dad was taking out his kids for fishing . . . and when the fish finally got caught on the fishing rod they were all helping each other reel it in . . . the kids were very excited and happy to have caught their first fish

FL learner CEFR C:

a father and his two children out on some lake fishing . . . its their first time to catch fish . . . and the little boy catches one and his father helps him pull it out . . . he was happy

FL learner CEFR B:

there's two kids trying to get or catch a fish . . . it seems like it was their first time doing that . . . their father was helping them . . . and when they catch one they were very happy

English *excitement* Clip 3:

English native speaker:

there's a little boy who's at his birthday . . . and he's getting ready to blow his candles out . . . and he's smiling quite happy . . . he just can't wait to blow them out he's excited . . . sort of impatient very highly strung

Immersion learner:

the child was very happy that it was his birthday and he couldn't wait until he was able to blow the candles out he was very excited . . . and when he finally did blow his candles out . . . he was very happy . . . like he was overjoyed by the whole experience

FL learner CEFR C:

a two year old boy on his birthday . . . they threw him a big birthday party and he's very happy and excited about blowing his candles . . . and when he does everybody claps for him and he's so excited

FL learner CEFR B:

there's a child in his birthday party and he has a cake and candles and everything . . . he wants to blow his candles on his cake . . . he was jumping in his seat and smiling . . . he was happy

English *excitement* Clip 4:

English native speaker:

a little boy coming in and getting on the little girl's bed . . . who I guess is his sister . . . and they're smiling and seemed to be quite happy and quite excited . . . their mum comes in and seemed quite pleased as well but is trying to impose discipline as she's trying to get her children to go to bed

Immersion learner:

the kids were excited to go to Disney land and they couldn't sleep at night . . . and so when their mom walked in and saw them she told them off and told them to go back to sleep

FL learner CEFR C:

a family was going to Disney world the next morning and the kids were so excited about going that they can't sleep . . . and in the next scene they're in Disney having the time of their life

FL learner CEFR B:

a boy was excited to go to Disney . . . he went to wake his sister and he was jumping in his sister's bed . . . they were happy

English *excitement* Clip 5:

English native speaker:

So the little boy who's just spotted Thomas the Tank engine . . . at first he's sort of shell-shocked and couldn't believe he just saw a cartoon character . . . and then he starts doing a little dance and stomping around in a happy and excited way

Immersion learner:

the kid saw the train and he got very excited and started jumping around and pointing at the train like he was saying it's a train it's a train . . . the mother was happy and clapping her hands looking at her child . . . he was so excited he was spinning around

FL learner CEFR C:

a little boy seeing a train for the first time and he feels really happy . . . he was jumping and pointing at it and waving about . . . like he couldn't believe his eyes are seeing a big moving train

FL learner CEFR B:

the child saw Thomas the train . . . it's a cartoon and he saw it in real life . . . like his dream come true . . . he was like happy and he was jumping and pointing and calling his family to come see

Arabic *excitement* Clip 1:

Arabic monolingual:

yāhil mistānis laʾanna bisāfir ʾawwal marra . . . fa kān gāʿid yʿabbir ʿan farḥitah ʾinna gāʿid ynāgiz

Translation:

a child happy to be travelling for the first time . . . so he was expressing his happiness by jumping

Immersion learner:

ʾilwalad kān ʾinna ʾawwal marra yrūḥ bilṭayyāra w ysāfir fīha . . . fa kān mitḥammis w yaʿni mistānis ʾinna šāyif ʾilṭayyāra . . . fa kān gāʿid ynāgiz w yḥarrik ʾīdah fōg w taḥat w yargiṣ

Translation:

it was the boy's first time on a plane . . . so he was excited and like happy to see it in real life . . . so he was jumping and waving his arms up and down and dancing

FL learner CEFR C:

ṣbaī ṣɣīr ʾawwal marra byirkab bilṭayyāra . . . w kān ḥadda mistānis . . . kān mū gādir yamsik nafsah min ʾlwanāsah

Translation:

a little boy about to go on the plane for the first time . . . he was so happy . . . he couldn't contain himself from all the happiness

FL learner CEFR B:

yāhil bilmaṭār ʾawwal marra yimkin byirkab ṭayyāra . . . fa wāyid mitšawwig w gāʿid yitxayyal ʾinna gāʿid yṭīr . . . kān ḥadda mistānis

Translation:

a child in the airport about to go on a plane for the first time . . . he was very excited and he was imagining that he was flying on it . . . he was very happy

Arabic *excitement* Clip 2:

Arabic monolingual:

ʾubu gāʿid yʿallim wildah yṣīd simatš . . . fa lamma ṣādaw waḥda kān wāyid mistānis . . . w lamma yarroha gām yṣaffig mistānis fīha

Translation:

a father was teaching his son how to fish . . . and when they caught a fish he was very happy . . . when they reeled it in he was clapping happy about his catch

Immersion learner:

ʾilwalad kān maʿa ʾubūh . . . w kānaw gāʿid yṣīdūn simatš . . . ʾāxir šaī lamma ʾilsmitšah ʿalligat bilsinnārah gām ʾiyyirha w kān wāyid mistānis inna ṣādha . . . w ʾilbnayya kānat mistānsa baʿad

Translation:

the boy was with his father . . . and they were fishing . . . when the fish got caught on their rod he started to pull it in and he was very happy to have caught it . . . the girl was happy too

FL learner CEFR C:

ʾubu maʿa ʿyāla ʾaθnaīn ṭālʿīn ḥadāg . . . rāyḥīn yṣīdūn simatš . . . w ʾilwalad ṣād smitšah . . . w ʾubūh sāʿidah ʾiyyirha . . . w kān wāyid mistānis min ʾinjāzah

Translation:

a father out fishing with his two children . . . they were catching fish . . . then the boy caught one and his father helped him reel it in . . . he was so happy about his achievement

FL learner CEFR B:

ṣbaī w ʾixtah ʾawwal marra yṣīdūn simatš . . . fa kān ʾilṣbaī ʾilly ṣād ʾilsmitšah . . . ʾubūh sāʿidah yṣīdha w ʾawwal mā misakha kān mistānis

Translation:

a boy and his sister fishing for the first time . . . and it was the boy who caught the fish . . . their father helped him bring it in and when he held it he was happy

Arabic *excitement* Clip 3:

Arabic monolingual:

ṣbaī bʿīd mīlādah mistānis ʾinna ʿindah kaīka fīha šmūʿ . . . gāʿid yargiṣ farḥān

Translation:

a boy in his birthday party happy that he has a cake with candles . . . he was dancing happily

Immersion learner:

walad gāʿid yiḥtifil bʿīd mīlādah w mistānis . . . w kānaw msakrīn ʾillayt fa taḥammas wāyid mū gādir yanṭir ʾinna yinfax ʿala ʾilšmūʿ . . . w lamma fatšaw ʾillayt kilman gām yṣaffig fa kān mistānis

Translation:

a boy celebrating his birthday and he was happy . . . they has the lights off and so he was very happy he can't wait to blow out the candles . . . and when they switched the lights on everyone was applauding so he was happy

FL learner CEFR C:

ṣbaī ṣɣīr ʿumrah sintaīn bḥaflat ʿīd mīlādah . . . wāyid mistānis . . . w kān mū gādir yanṭir ʿala mā yinfax ʾilšmūʿ nāṭir yxalṣūn ʾilɣniyyah

Translation:

a little two year old boy in his birthday party . . . he was so happy . . . he couldn't wait for the song to finish so he can blow out his candles

FL learner CEFR B:

ṣbaī ʿumrah sintaīn yimkin ʾawwal marra ysawūnlah ḥaflat ʿīd mīlād . . . fa kān wāyid mistānis . . . mū gādir yaṣbir ʿašān yṭaffi šmūʿa

Translation:

a two year old boy in what I assume is his first birthday party . . . he was very happy . . . he couldn't wait to blow his candles out

Arabic *excitement* Clip 4:

Arabic monolingual:

yehāl ʾθnaīn . . . ʾilwalad rāḥ ḥag ʾixtah ygūl laha ʾinna binrūḥ Disney bātšir ʾilṣibḥ . . . baʿdaīn ʾilʾum yat w gālat luhum ynāmūn . . . bas kānaw wāyid mistānsīn

Translation:

two children . . . the boy went to his sister to tell her that they're going to Disney tomorrow morning . . . and then their mother came in and told them to go to sleep . . . but they were too happy

Immersion learner:

yehāl kānaw mistānsīn birūḥūn Disney land filyom ʾilθāni . . . fa ʾilwalad kān mistānis . . . w min kiθir farḥitah rāḥ ḥag ʾixtah . . . fa kānaw ʾaθnaīnhum mistānsīn . . . ʾāxir šaī ṣādtathom ʾilʾum w gālat luhum nāmaw

Translation:

the children were happy to be going to Disney land the following day . . . so the boy was happy . . . he was so happy he went to his sister . . . they were both happy . . . in the end their mother caught them and told them to go to sleep

FL learner CEFR C:

xwān ʾaθnaīn mū gādrīn ynamūn laʾanna ḥadhum miṯḥamsīn ʾinna bātšir ʾilṣibḥ birūḥūn Disney world . . . ʾilwalad rāḥ gaʿʿad ʾixtah laʾanna mistānis mū gādir ynam . . . lamma yat ʾumhum w gālat shhh

Translation:

two siblings were so excited about going to Disney world that they couldn't sleep . . . the boy was so eager and happy he went and woke his sister up . . . their mother then came in and said shhh

FL learner CEFR B:

xwān ʾaθnaīn ʾumhum bitwaddīhom Disney land fa kānaw ʾaθnainhum mistānsīn lidarajat ʾinhum mū gādrīn ynamūn

Translation:

a mother promised her two children to go to Disney land and so they were so happy they couldn't go to sleep

Arabic *excitement* Clip 5:

Arabic monolingual:

walad ṣɣīr šāf cartoon yḥibbah qiṭār Thomas . . . fa lamma šāfa gaʿad ynāgiz mistānis w nāda ʾumma tiyī tšūf

Translation:

a little boy saw his favourite cartoon character Thomas the train . . . and so when he saw it he was happy and he was jumping and went to call his mother to come see

Immersion learner:

ʾilwalad ʾawwal marra yšūf qiṭār . . . w kān mistānis . . . w kān gāʿid yʿabbir ʿan farḥitah ʾinna kān gāʿid ynāgiz w yargiṣ . . . w ʾilʾum kānat tṣaffiglah mistānsah

Translation:

a boy sees a train for the first time . . . he was happy . . . and he was expressing his happiness by jumping and dancing . . . and his mother was clapping happily

FL learner CEFR C:

walad wiya ʾahalah w šāf qiṭār yḥibbah . . . w kān ʾawwal marra yšūfa . . . fa kān wāyid mistānis mū mṣaddig

Translation:

a boy was out with his family when he saw a train that he loved . . . it was his first time seeing this train . . . and so he was very happy he couldn't believe it

FL learner CEFR B:

ṣbaī ṣɣīr ʾawwal marra yšūf qiṭār fa kān wāyid mistānis lamma šāfa . . . kan yabi kilman yšūfa ywarrīhum ʾilqiṭār

Translation:

a little boy saw a train for the first time and was very happy when he saw it . . . he wanted everyone to come see the train

Appendix E2: Examples from the *frustration* narratives

English *frustration* Clip 1:

English native speaker:

at first the person in the clip looks like a man . . . he's running through a box and looks in his drawers and sort of gives the impression that he's searching for something . . . then he starts to throw the things in the box around as if those items are not the ones he's looking for . . . this is causing him distress in a way so he seems to be very frustrated

Immersion learner:

the guy was looking for something specific . . . and when he didn't find it he started turning green . . . like he got frustrated because he couldn't find what he was looking for . . . and then he became angry and became totally green

FL learner CEFR C:

a man who was looking for something he lost . . . and he opens up a box and looks inside . . . and I think what the green stands for is his nerves or something . . . and then it shows as he walks around the house looking for it . . . like it shows he's getting really angry and frustrated that he couldn't find it

FL learner CEFR B:

There's a man who was trying to find something he lost . . . the color green . . . maybe his nerves were showing up in his body . . . maybe it's a sign of anger

English *frustration* Clip 2:

English native speaker:

there's this man at a computer . . . and you can see there's a tension . . . his whole body is quite tense . . . and there seems to be a build up of frustration and that quickly turns into violence and overt aggression and he attacks the computer and storms off

Immersion learner:

the guy has all his work on his computer . . . I don't know what happens to it . . . but he was trying to retrieve his work but the computer crashes . . . and so all his work is gone . . . he's frustrated and angry . . . and so he beats the hell out of his computer

FL learner CEFR C:

he seems like an office worker . . . and he seemed like he got really angry because his computer must have broken down or something and he lost all of his work . . . so he's angry and lost his mind for a second and destroyed it

FL learner CEFR B:

in the office there's a man . . . he's working on his computer . . . it crashes so he was trying to get it fixed but it doesn't work . . . he's angry

English *frustration* Clip 3:

English native speaker:

there's a little girl and there seems to be some sort of maybe a helium balloon or something which has floated up to the ceiling and so had the string coming down . . . it was just out of her reach so she was trying to reach it . . . and she keeps getting quite close just touching the end of the string but not quite being able to grasp it . . . and she keeps doing this and she's slightly more frustrated by this but keeps going . . . and at the end she gives up and is a bit upset by this

Immersion learner:

the little girl felt like it was her duty to get the balloon because she didn't give up . . . she was such a fighter and she kept on trying to reach her balloon . . . she was determined but she just couldn't reach it . . . it was very frustrating for her . . . and I think she was disappointed in herself in the end when she couldn't get it

FL learner CEFR C:

a little girl in her living room trying to catch the balloon . . . and she keeps trying and trying and jumping . . . she didn't want to give up so she tries and she's complaining that she can't . . . that it's too high . . . she's sad . . . and in the end she feels frustrated and cries

FL learner CEFR B:

a little child wants her balloon . . . so she was trying to catch it but she can't . . . she can't get it it's too difficult she was complaining . . . she was sad because she couldn't get her balloon

English *frustration* Clip 4:

English native speaker:

a little boy who was trying to dress himself . . . and he's kind of got his arm into the t-shirt the wrong way so it's stuck on his shoulder . . . and so he's trying to pull it down . . . and he's kind of confused he can't figure out why he can't pull the t-shirt down over his body . . . and he continues doing this and he gets very frustrated and starts storming about and starts hitting stuff

Immersion learner:

the kid was trying to wear his clothes by himself . . . but he put it on wrong . . . it was kind of twisted inside out . . . and so he got frustrated and started hitting his chair his toys . . . finally he was just over it he was very frustrated I think

FL learner CEFR C:

a little boy has his shirt like one of his arms backwards and he doesn't know he can't seem to fix it . . . he can't figure it out . . . he tries and tries and then he gets really angry and starts hitting everything even his shoulder . . . and in the end he's on his bed crying

FL learner CEFR B:

there's a boy in the room . . . he was roaming around . . . first he took off his shirt . . . then he tries to wear it but he wears it inside out so he was angry . . . he was trying to figure out how to wear it right but he can't . . . so he lay down frustrated and sad

English *frustration* Clip 5:

English native speaker:

there's an adolescent boy in the shower and he's washing his hair . . . so he was trying to rinse out all of the shampoo . . . and there's another guy . . . as he's rinsing out the shampoo this other guy is pouring more shampoo on his hair . . . which kind of continues the process and makes it repeat to the frustration and increased annoyance of the younger guy

Immersion learner:

this kid was in this shower . . . and he's trying to wash out his hair . . . but the guy in the back kept pouring shampoo on top of his hair . . . and so the shampoo wouldn't wash away . . . and so this kid just got frustrated and he's trying to wash the shampoo off but it won't come off because that other guy keeps adding to it and well the kid seemed very frustrated

FL learner CEFR C:

two guys in what I think is a general shower room . . . so the guy was pulling a prank on his friend . . . so this guy was trying to wash his hair like the shampoo out of his hair . . . and this friend was squirting more shampoo without him knowing . . . so he starts to feel stressed and then the more it happens the more angry he gets

FL learner CEFR B:

two friends I think . . . one of them is playing a prank while one of them is taking a shower . . . he thought the shampoo wasn't coming out of his hair because this friend was putting more shampoo . . . so he got angry and hit his head in the shower

Arabic *frustration* Clip 1:

Arabic monolingual:

wāḥid gāʿid ydawwir ʿaɣrāẓah bas mū lāgīhum . . . ydawwir ydawwir bas māku . . . fa ʿaṣṣab

Translation:

a guy looking for his things but he couldn't find them . . . he searched and searched but found nothing . . . so he got angry

Immersion learner:

rayyāl kān gāʿid ydawwir ʿala šaī ḍāyiʿ . . . fa kān gāʿid ydawwir ydawwir . . . šwaī šwaī bida yʿaṣṣib . . . fa lamma mā ligāh ʾāxir šaī ʿaṣṣab

Translation:

a man was searching for something he lost . . . so he was searching and searching . . . slowly he starts to feel angry . . . when he couldn't find it in the end he got angry

FL learner CEFR C:

wāḥid ḍāyiʿ minna šaī w gāʿid ydawrah . . . dawwirah bkartōn w baʿdaīn bkabatātah w ʾilyarārāt . . . dawwirah bkubur ʾilbaīt bas mū lāgīh mā ligāh . . . wāyid ʿaṣṣab

Translation:

a guy who's lost something and is looking for it . . . he looked for it in a box in his wardrobe in his drawers . . . he looked for it all round the house but couldn't find it . . . he was really angry

FL learner CEFR B:

wāḥid kān gāʿid ydawwir w yṭalliʿ ʿaɣrāẓah šaklah ḍāyyiʿ minna šaī . . . w šaklah kān mʿaṣṣib lamma mā ligāh

Translation:

a man was searching for something and rummaging through his things . . . he seems like he lost something . . . he looks like he got angry when he couldn't find it

Arabic *frustration* Clip 2:

Arabic monolingual:

kān gāʿid yištiɣil biljihāz bilmaktab . . . ʿatwaqqaʿ ʿallag fa ʿaṣṣab fa gām yṭigga w gām w ṭalaʿ

Translation:

he was working on his computer in his office . . . I think his computer lagged so he got angry and started to hit the computer and then he walked off

Immersion learner:

ʾilrayyāl kān kil šiɣla ʿala ʾilcomputer māla . . . fa lamman ʾixtarab w mū gādir yriddah ʿaṣṣab wāyid . . . w kān yḥāwil yriddah bas mū gādir killiš . . . ʾāxir šaī gām yṭig ʾilcomputer . . . kān wāyid mʿaṣṣib

Translation:

the man had all his work on his computer . . . and so when it broke down and couldn't get it back he got really angry . . . he was trying to get it to work and but he just couldn't . . . in the end he started to beat the computer . . . he was very angry

FL learner CEFR C:

muwaẓẓaf šiɣla killa ʿala ʾilcomputer . . . w fajʾa kil šaī ʾinmisaḥ . . . fa kān wāyid mʿaṣṣib . . . wiṣal marḥala ʾinhār nafsiyyan w kassar kil šaī

Translation:

an employee had all his work on his computer . . . suddenly everything got erased . . . so he was very angry . . . he reached a point where be broke down and destroyed everything

FL learner CEFR B:

wāḥid kān gāʿid bilmaktab gāʿid yištiɣil ʿala ʾilcomputer . . . bas yimkin taʿaṭṭal fa wāyid kān mʿaṣṣib w mitnarfiz . . . kassar kil šaī jidāmah

Translation:

a man was in his office working on his computer . . . but I think it crashed so he was very angry and annoyed . . . he broke everything in his sight

Arabic *frustration* Clip 3:

Arabic monolingual:

bnayya gāʿda tḥāwil tamsik ballōna bs mū gādra tōṣal laha laʾanha gṣīra . . . fa kil marra gāʿda tḥāwil mā tigdar . . . filʾaxīr gʿadat tabtši ḥāšha ʾiḥbāt

Translation:

a girl was trying to reach her balloon but she couldn't because she was too short . . . so every try she fails . . . in the end she started crying she felt frustrated

Immersion learner:

bnayya kānat tabi tāxið ʾilballōna . . . w kānat mṣammimah ʾinha tāxiðha . . . fa kānat tḥāwil tiṭūlha bas kānat gṣīra fa mū gādra . . . fa ḥāšha miθil ʾiḥbāt

Translation:

a girl wants her balloon . . . and she was determined to get it . . . so she was trying to reach it but she was short so she couldn't . . . so she kind of felt frustrated

FL learner CEFR C:

bint ṣɣīrah gāʿda tḥāwil tamsik balōna bas mū gādra . . . w gāʿda tḥāwil bʾay ṭarīqa tangiz w tiṭōl w tangiz bas mū gādra . . . tammat tḥāwil w tḥāwil lamma ʾāxir šaī gāmat tabtši zaʿlāna

Translation:

a little girl was trying to reach her balloon but she couldn't . . . she was trying any way she can she was jumping and reaching but she just can't . . . she kept on trying and trying until in the end she started to cry she was sad

FL learner CEFR B:

bnayya māska balōnatha tšān tiṭīr . . . ḥāwilat tangiz ʿašān tiṭōlha bas mū gādra tamsikha . . . fa kānat wāyid zaʿlāna

Translation:

a girl was holding her balloon but it flew out of her hand . . . she tried to get it back she was jumping but she can't reach it . . . so she was very sad

Arabic *frustration* Clip 4:

Arabic monolingual:

ṣbaī ṣɣīr gāʿid yḥāwil yalbis ʾilblōza maltah w mʿalga mū ʿārif ysanniʿha . . . mū raḍya tanzil . . . fa gām yṭig ʾalʿābah mʿaṣṣib laīš mū gādir yʿaddilha

Translation:

a little boy was trying to put on his shirt but it got stuck and he didn't know how to fix it . . . it won't come down . . . so he started hitting his toys angry why he couldn't fix it

Immersion learner:

yāhil mū ʿārif yalbis malābsah brūḥah . . . fa kān yḥāwil w libasha ɣalaṭ . . . w mū ʿārif yʿaddilha . . . fa ʿaṣṣab w gām yṭig ʾilly jiddāmah . . . ʾāxir šaī gām yabtši

Translation:

a kid doesn't quite know how to put on his own clothes . . . he was trying but ended up wearing it wrong . . . and he couldn't fix it . . . so he got angry and started hitting whatever is in front of him . . . in the end he started crying

FL learner CEFR C:

walad ṣɣīr yimkin ʿumrah xams snīn gāʿid yḥāwil yalbis blōztah . . . gāʿid yḥāwil ʾinna yʿaddil tšimma bas mū ʿārif šlon . . . w ḥadda mʿaṣṣib gām yṭig kil šaī

Translation:

a little boy perhaps he was around 5 years old trying to put on his shirt . . . he was trying to fix the sleeve but he doesn't know how . . . he was very angry he started to hit everything

FL learner CEFR B:

yāhil gāʿid yalbis blōzta bas ʾilmuškila ʾinna ʾiltšim ṣār bilʿaks . . . fa yḥāwil yʿadla bas tšimma mʿallig . . . fa kan ḥadda mʿaṣṣib ṭag ʾilkirsy w ʾilguitar

Translation:

a child trying to put his shirt on but the problem was the sleeve was inside out . . . so he was trying to fix it but it was stuck . . . so he was very angry and hit the chair and his guitar

Arabic *frustration* Clip 5:

Arabic monolingual:

ṣbaīyaīn gāʿdīn bilḥammam . . . wāḥid gāʿid yitsabbaḥ w ḥaṭ ʾilshampoo fōg rāsah . . . bas kil mā ɣassal rifījah ʾilly warāh yḥiṭ shampoo zyādah . . . tinarfaz mā yadri . . .

Translation:

two guys in the shower room . . . one was having a shower and put shampoo on his head . . . but every time he washes it off his friend adds more shampoo . . . he was annoyed he didn't know what was causing it

Immersion learner:

wāḥid gāʿid yitsabbaḥ o gāʿid ynaẓẓif šaʿrah min ʾilshampoo . . . w rifījah gāʿid yzīdlah ʾilshampoo min warāh . . . kil mā ɣassal kil mā zād . . . fa mū gāʿid yrūḥ . . . lamman tinarfaz

Translation:

a guy in the shower was washing the shampoo out of his hair . . . but his friend was adding more shampoo behind his back . . . so the more he rinses the more he adds . . . so it wasn't washing off . . . until he got annoyed

FL learner CEFR C:

wāḥid kān gāʿid yāxiẓ shower w rifījah gāʿid ysawwi fīh dagga . . . kil mā ɣassal kil mā

ḥaṭlah shampoo zyādah . . . w kil mā ɣassal kil mā ḥaṭ . . . fa kān wāyid mʿaṣṣib laʾanna mū ʿārif šlōn yšīlah . . . mā yadri ʾinna dagga

Translation:

a guy in the shower and his friend was pulling a prank on him . . . every time he washes the shampoo out his friend would add more . . . the more he washes the more his friend adds more . . . so he was very angry because he doesn't know how to wash it off . . . he didn't realize it was a prank

FL learner CEFR B:

wāḥid gāʿid ysawwi maqlab brifījah . . . rifījah gāʿid yɣassil w hāða yatris rāsah zyādah shampoo . . . fa mū rāḍy yrūḥ . . . ʾāxir šaī gām yṭig rāsah mʿaṣṣib

Translation:

a guy pranking his friend . . . so his friend was in the shower and this guy kept on putting more shampoo on his head . . . so it wasn't washing off . . . in the end he started to hit his head he was angry

Appendix F1: Descriptive case summaries - English *excitement* clips

Descriptive case summaries of each individual clip in terms of length of the narratives and variety of emotion words used in the English *excitement* clips:

1. English Excitement: Clip 1

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	19	25	0.65	560
	Mean	1.27	1.67		37.33
	SD	0.45	0.61		9.87
Immersion Learners *N* = 31	Sum	46	54	0.79	1034
	Mean	1.48	1.74		33.35
	SD	0.50	0.44		9.54
FL CEFR C *N* = 32	Sum	48	54	1.11	927
	Mean	1.50	1.69		28.97
	SD	0.50	0.47		7.99
FL CEFR B *N* = 10	Sum	14	16	1.5	253
	Mean	1.4	1.6		25.3
	SD	0.51	0.51		6.99

2. English Excitement: Clip 2

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	23	28	0.93	755
	Mean	1.53	1.87		50.33
	SD	0.51	0.64		14.00
Immersion Learners *N* = 31	Sum	42	45	2.02	1451
	Mean	1.35	1.45		46.81
	SD	0.48	0.56		15.20
FL CEFR C *N* = 32	Sum	37	38	6.55	1209
	Mean	1.16	1.19		37.78
	SD	0.36	0.39		12.02
FL CEFR B *N* = 10	Sum	11	13	1.36	309
	Mean	1.1	1.3		30.9
	SD	0.31	0.48		9.19

3. English Excitement: Clip 3

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	24	28	1.24	583
	Mean	1.60	1.87		38.87
	SD	0.5	0.35		9.92
Immersion Learners *N* = 31	Sum	49	59	0.66	1165
	Mean	1.58	1.90		37.58
	SD	0.50	0.83		13.26
FL CEFR C *N* = 32	Sum	45	53	0.80	1041
	Mean	1.41	1.66		32.53
	SD	0.49	0.70		9.52
FL CEFR B *N* = 10	Sum	12	16	0.69	261
	Mean	1.2	1.6		26.1
	SD	0.42	0.51		11.39

4. English Excitement: Clip 4

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	18	23	0.73	665
	Mean	1.2	1.53		44.33
	SD	0.41	0.51		14.78
Immersion Learners *N* = 31	Sum	41	48	0.83	1260
	Mean	1.32	1.55		40.65
	SD	0.47	0.50		12.30
FL CEFR C *N* = 32	Sum	48	49	5.81	1086
	Mean	1.5	1.53		33.94
	SD	0.51	0.56		12.37
FL CEFR B *N* = 10	Sum	13	14	3.11	303
	Mean	1.3	1.4		30.3
	SD	0.48	0.51		11.82

5. English Excitement: Clip 5

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	19	23	0.89	570
	Mean	1.27	1.53		38.00
	SD	0.45	0.64		13.09
Immersion Learners *N* = 31	Sum	44	53	0.70	1067
	Mean	1.42	1.71		34.42
	SD	0.5	0.74		11.84
FL CEFR C *N* = 32	Sum	45	48	1.95	948
	Mean	1.41	1.5		29.63
	SD	0.49	0.56		10.91
FL CEFR B *N* = 10	Sum	13	14	3.11	286
	Mean	1.3	1.4		28.6
	SD	0.48	0.51		10.22

Appendix F2: Descriptive case summaries - Arabic *excitement* clips

Descriptive case summaries of each individual clip in terms of length of the narratives and variety of emotion words used in the Arabic *excitement* clips:

1. Arabic Excitement: Clip 1

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	20	23	1.34	342
	Mean	1.18	1.35		20.12
	SD	0.39	0.60		8.41
Immersion Learners *N* = 31	Sum	44	51	0.95	652
	Mean	1.42	1.65		21.03
	SD	0.62	0.66		7.76
FL CEFR C *N* = 32	Sum	38	50	0.48	600
	Mean	1.19	1.56		18.75
	SD	0.47	0.62		5.58
FL CEFR B *N* = 10	Sum	13	16	1	180
	Mean	1.30	1.60		18.0
	SD	0.48	0.69		5.37

2. Arabic Excitement: Clip 2

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	20	25	0.86	452
	Mean	1.18	1.47		26.59
	SD	0.39	0.51		12.25
Immersion Learners *N* = 31	Sum	34	45	0.50	911
	Mean	1.1	1.45		29.39
	SD	0.30	0.62		10.99
FL CEFR C *N* = 32	Sum	33	41	0.63	754
	Mean	1.03	1.28		23.56
	SD	0.17	0.45		7.18
FL CEFR B *N* = 10	Sum	10	13	0.86	221
	Mean	1.0	1.3		22.1
	SD	0.0	0.67		9.53

3. Arabic Excitement: Clip 3

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	21	25	1.11	326
	Mean	1.24	1.47		19.18
	SD	0.43	0.71		6.31
Immersion Learners *N* = 31	Sum	41	55	0.42	748
	Mean	1.32	1.77		24.13
	SD	0.47	0.56		9.16
FL CEFR C *N* = 32	Sum	38	55	0.32	718
	Mean	1.19	1.72		22.44
	SD	0.39	0.63		8.36
FL CEFR B *N* = 10	Sum	11	13	1.36	168
	Mean	1.1	1.3		16.8
	SD	0.31	0.48		8.14

4. Arabic Excitement: Clip 4

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	22	25	1.56	459
	Mean	1.29	1.47		27.00
	SD	0.47	0.51		13.34
Immersion Learners *N* = 31	Sum	39	48	0.65	886
	Mean	1.26	1.55		28.58
	SD	0.44	0.76		8.78
FL CEFR C *N* = 32	Sum	35	45	0.55	819
	Mean	1.09	1.41		25.59
	SD	0.29	0.49		9.84
FL CEFR B *N* = 10	Sum	11	15	0.70	197
	Mean	1.1	1.5		19.7
	SD	0.31	0.52		8.36

5. Arabic Excitement: Clip 5

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	25	28	1.49	365
	Mean	1.47	1.65		21.47
	SD	0.71	0.78		11.61
Immersion Learners *N* = 31	Sum	40	48	0.73	701
	Mean	1.29	1.55		22.61
	SD	0.46	0.62		8.29
FL CEFR C *N* = 32	Sum	38	44	0.87	660
	Mean	1.19	1.38		20.63
	SD	0.39	0.55		7.85
FL CEFR B *N* = 10	Sum	10	11	2.45	175
	Mean	1.0	1.1		17.5
	SD	0.0	0.31		4.32

Appendix F3: Descriptive case summaries - English *frustration* clips

Descriptive case summaries of each individual clip in terms of length of the narratives and variety of emotion words used in the English *frustration* clips:

1. English Frustration: Clip 1

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers	Sum	22	22	-	650
	Mean	1.47	1.47		43.33
N = 15	SD	0.74	0.74		16.03
Immersion Learners	Sum	49	52	2.82	1313
	Mean	1.58	1.68		42.35
N = 31	SD	0.62	0.70		16.90
FL CEFR C	Sum	42	45	2.02	1132
N = 32	Mean	1.31	1.41		35.38
	SD	0.53	0.61		13.24
FL CEFR B	Sum	13	13	-	249
N = 10	Mean	1.3	1.3		24.9
	SD	0.48	0.48		8.43

2. English Frustration: Clip 2

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers	Sum	28	35	0.68	631
	Mean	1.87	2.33		42.07
N = 15	SD	0.64	0.61		10.95
Immersion Learners	Sum	52	61	0.74	1323
	Mean	1.68	1.97		42.68
N = 31	SD	0.70	0.83		14.71
FL CEFR C	Sum	45	52	0.94	1331
N = 32	Mean	1.41	1.62		41.59
	SD	0.56	0.61		13.17
FL CEFR B	Sum	12	13	2.38	295
N = 10	Mean	1.2	1.3		29.5
	SD	0.42	0.48		7.77

3. English Frustration: Clip 3

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	29	32	1.76	813
	Mean	1.93	2.13		54.2
	SD	0.88	0.99		19.54
Immersion Learners *N* = 31	Sum	45	45	-	1453
	Mean	1.45	1.45		46.87
	SD	0.67	0.67		15.46
FL CEFR C *N* = 32	Sum	45	46	6	1328
	Mean	1.41	1.44		41.5
	SD	0.49	0.50		15.04
FL CEFR B *N* = 10	Sum	12	14	1.33	355
	Mean	1.2	1.4		35.5
	SD	0.42	0.51		12.89

4. English Frustration: Clip 4

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	34	36	3.36	832
	Mean	2.27	2.4		55.47
	SD	0.79	0.91		19.00
Immersion Learners *N* = 31	Sum	58	64	1.27	1517
	Mean	1.87	2.06		48.94
	SD	0.67	0.68		15.77
FL CEFR C *N* = 32	Sum	52	58	1.06	1500
	Mean	1.63	1.81		46.88
	SD	0.61	0.74		12.13
FL CEFR B *N* = 10	Sum	16	18	1.74	393
	Mean	1.6	1.8		39.3
	SD	0.84	0.79		15.22

5. English Frustration: Clip 5

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
English N. Speakers *N* = 15	Sum	28	29	3.67	1012
	Mean	1.87	1.93		67.47
	SD	0.83	0.79		17.07
Immersion Learners *N* = 31	Sum	40	42	3.13	1830
	Mean	1.29	1.35		59.03
	SD	0.53	0.61		17.15
FL CEFR C *N* = 32	Sum	36	38	3.27	1782
	Mean	1.13	1.19		55.69
	SD	0.33	0.39		12.49
FL CEFR B *N* = 10	Sum	10	10	-	453
	Mean	1.0	1.0		45.3
	SD	0.0	0.0		15.56

Appendix F4: Descriptive case summaries - Arabic *frustration* clips

Descriptive case summaries of each individual clip in terms of length of the narratives and variety of emotion words used in the Arabic *frustration* clips:

1. Arabic Frustration: Clip 1

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	19	20	2.81	435
	Mean	1.12	1.18		25.59
	SD	0.33	0.39		13.50
Immersion Learners *N* = 31	Sum	44	57	0.49	881
	Mean	1.42	1.84		28.42
	SD	0.56	0.86		10.30
FL CEFR C *N* = 32	Sum	46	52	1.13	774
	Mean	1.44	1.63		24.19
	SD	0.5	0.66		10.01
FL CEFR B *N* = 10	Sum	13	14	3.11	230
	Mean	1.3	1.4		23.00
	SD	0.48	0.51		6.86

2. Arabic Frustration: Clip 2

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	18	26	0.48	418
	Mean	1.06	1.53		24.59
	SD	0.24	0.71		6.92
Immersion Learners *N* = 31	Sum	40	49	0.64	863
	Mean	1.29	1.84		27.84
	SD	0.46	0.56		9.96
FL CEFR C *N* = 32	Sum	41	47	0.98	829
	Mean	1.28	1.47		25.91
	SD	0.58	0.67		9.97
FL CEFR B *N* = 10	Sum	14	15	3.06	215
	Mean	1.4	1.5		21.5
	SD	0.69	0.71		7.53

3. Arabic Frustration: Clip 3

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	19	19	-	466
	Mean	1.12	1.12		27.41
	SD	0.33	0.33		10.80
Immersion Learners *N* = 31	Sum	46	54	0.79	928
	Mean	1.48	1.74		29.94
	SD	0.62	0.73		11.63
FL CEFR C *N* = 32	Sum	41	44	2.04	881
	Mean	1.28	1.38		27.53
	SD	0.45	0.55		8.12
FL CEFR B *N* = 10	Sum	12	13	2.38	259
	Mean	1.2	1.3		25.9
	SD	0.42	0.48		8.59

4. Arabic Frustration: Clip 4

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	22	24	1.97	532
	Mean	1.29	1.41		31.29
	SD	0.58	0.62		16.59
Immersion Learners *N* = 31	Sum	47	53	1.12	1110
	Mean	1.52	1.71		35.81
	SD	0.62	0.82		13.24
FL CEFR C *N* = 32	Sum	47	51	1.90	1077
	Mean	1.47	1.59		33.66
	SD	0.56	0.66		11.38
FL CEFR B *N* = 10	Sum	10	11	2.45	301
	Mean	1.0	1.1		30.1
	SD	0.0	0.31		14.44

5. Arabic Frustration: Clip 5

Context of Learning/Proficiency		Number of emotion lemmas	Number of emotion word tokens	Richness of emotion vocabulary TTR	Number of word tokens
Arabic Monolinguals *N* = 17	Sum	20	21	4.14	669
	Mean	1.18	1.24		39.35
	SD	0.39	0.43		12.47
Immersion Learners *N* = 31	Sum	36	39	1.62	1283
	Mean	1.16	1.26		41.39
	SD	0.37	0.51		13.03
FL CEFR C *N* = 32	Sum	41	43	3.09	1351
	Mean	1.28	1.34		42.22
	SD	0.42	0.44		13.96
FL CEFR B *N* = 10	Sum	10	11	2.45	310
	Mean	1.0	1.1		31.00
	SD	0.0	0.31		9.27

Appendix G1: Emotion lemmas in the *excitement* narratives

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Arabic Monolinguals
Tokens (23) Clip 1

mistānis (adj.)	14
ʾilfarḥa (n.)	2
farḥitah (n.)	1
farḥān (adj.)	3
mitḥammis (adj.)	2

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (51) Clip 1

mistānis (adj.)	32
ʾilwanasah (n.)	2
ʾilfarḥa (n.)	1
farḥitah (n.)	1
farḥān (adj.)	2
mitḥammis (adj.)	11
mitšawwig (adj.)	2

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (50) Clip 1

mistānis (adj.)	38
ʾilwanasah (n.)	5
ʾilfarḥa (n.)	2
farḥān (adj.)	1
mitḥammis (adj.)	1
mitšawwig (adj.)	3

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (16) Clip 1

mistānis (adj.)	12
ʾilwanasah (n.)	1
ʾilfarḥa (n.)	1
farḥān (adj.)	1
mitšawwig (adj.)	2

English Emotion Lemmas in the *excitement* narratives by the English Native Speakers
Tokens (25) Clip 1

excited (adj.)	17
excitement (n.)	4
happy (adj.)	2
ecstatic (adj.)	2

English Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (54) Clip 1

excited (adj.)	36
excitement (n.)	4
happy (adj.)	12
happiness (n.)	2

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (54) Clip 1

excited (adj.)	25
excitement (n.)	3
happy (adj.)	22
happiness (n.)	3
ecstatic (adj.)	1

English Emotion Lemmas in the narratives by the FL Learners CEFR B
Tokens (16) Clip 1

excited (adj.)	8
happy (adj.)	7
happiness (n.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Arabic Monolinguals Tokens (25) Clip 2

mistānis (adj.)	16
ʾistānas (v.)	5
ʾilfarḥa (n.)	1
mitḥammis (adj.)	2
mitšawwig (adj.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Immersion Learners Tokens (45) Clip 2

mistānis (adj.)	32
ʾilwanasah (n.)	2
ʾistānas (v.)	3
farḥān (adj.)	1
mitḥammis (adj.)	6
mitšawwig (adj.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C Tokens (41) Clip 2

mistānis (adj.)	32
ʾilwanasah (n.)	1
ʾistānas (v.)	2
farḥān (adj.)	1
mitḥammis (adj.)	3
mitšawwig (adj.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B Tokens (13) Clip 2

mistānis (adj.)	10
ʾilwanasah (n.)	1
ʾistānas (v.)	2

English Emotion Lemmas in the *excitement* narratives by the English Native Speakers
Tokens (26) Clip 2

excited (adj.)	17
excitement (n.)	1
happy (adj.)	8

English Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (45) Clip 2

excited (adj.)	28
excitement (n.)	2
happy (adj.)	14
ecstatic (adj.)	1

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (38) Clip 2

excited (adj.)	16
happy (adj.)	22

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (12) Clip 2

excited (adj.)	3
happy (adj.)	9

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Arabic Monolinguals Tokens (25) Clip 3

mistānis (adj.)	16
ʾilwanasah (n.)	1
ʾilfarḥa (n.)	1
farḥān (adj.)	3
mitḥammis (adj.)	3
mitšawwig (adj.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Immersion Learners Tokens (55) Clip 3

mistānis (adj.)	36
ʾistānas (v.)	2
farḥitah (n.)	1
farḥān (adj.)	1
mitḥammis (adj.)	12
mitšawwig (adj.)	3

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C Tokens (55) Clip 3

mistānis (adj.)	37
ʾilwanasah (n.)	3
ʾistānas (v.)	7
ʾilfarḥa (n.)	1
farḥān (adj.)	1
mitḥammis (adj.)	4
mitšawwig (adj.)	2

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B Tokens (13) Clip 3

mistānis (adj.)	11
mitḥammis (adj.)	2

English Emotion Lemmas in the *excitement* narratives by the English Native Speakers
Tokens (27) Clip 3

excited (adj.)	16
excitement (n.)	2
happy (adj.)	9

English Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (59) Clip 3

excited (adj.)	34
excitement (n.)	1
happy (adj.)	24

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (53) Clip 3

excited (adj.)	24
happy (adj.)	29

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (14) Clip 3

excited (adj.)	4
happy (adj.)	10

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Arabic Monolinguals
Tokens (25) Clip 4

mistānis (adj.)	16
ʾilwanasah (n.)	1
ʾistānas (v.)	1
ʾilfarḥa (n.)	3
mitḥammis (adj.)	2
mitšawwig (adj.)	2

Kuwaiti Emotion Lemmas in the narratives by the Immersion Learners
Tokens (45) Clip 4

mistānis (adj.)	29
ʾilwanasah (n.)	3
ʾistānas (v.)	4
farḥitah (n.)	1
farḥān (adj.)	2
mitḥammis (adj.)	2
mitšawwig (adj.)	4

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (48) Clip 4

mistānis (adj.)	29
ʾilwanasah (n.)	5
ʾistānas (v.)	1
ʾilfarḥa (n.)	1
mitḥammis (adj.)	9
mitšawwig (adj.)	3

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (14) Clip 4

mistānis (adj.)	13
mitḥammis (adj.)	1

English Emotion Lemmas in the *excitement* narratives by the English Native Speakers
Tokens (23) Clip 4

excited (adj.)	18
excitement (n.)	3
happy (adj.)	2

English Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (48) Clip 4

excited (adj.)	34
excitement (n.)	4
happy (adj.)	9
happiness (n.)	1

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (49) Clip 4

excited (adj.)	25
excitement (n.)	2
happy (adj.)	22

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (14) Clip 4

excited (adj.)	8
happy (adj.)	6

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Arabic Monolinguals
Tokens (28) Clip 5

mistānis (adj.)	12
ʾilwanasah (n.)	1
ʾistānas (v.)	3
ʾilfarḥa (n.)	4
farḥitah (n.)	1
mitḥammis (adj.)	5
mitšawwig (adj.)	2

Kuwaiti Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (48) Clip 5

Mistānis (adj.)	21
ʾilwanasah (n.)	7
ʾistānas (v.)	8
farḥān (adj.)	2
Mitḥammis (adj.)	10

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (44) Clip 5

mistānis (adj.)	19
ʾilwanasah (n.)	7
ʾistānas (v.)	11
farḥān (adj.)	2
farḥitah (n.)	1
mitḥammis (adj.)	3
mitšawwig (adj.)	1

Kuwaiti Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (11) Clip 5

mistānis (adj.)	10
mitḥammis (adj.)	1

English Emotion Lemmas in the *excitement* narratives by the English Native Speakers
Tokens (23) Clip 5

excited (adj.)	15
excitement (n.)	4
happy (adj.)	3
happiness (n.)	1

English Emotion Lemmas in the *excitement* narratives by the Immersion Learners
Tokens (49) Clip 5

excited (adj.)	29
excitement (n.)	6
happy (adj.)	12
happiness (n.)	2

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR C
Tokens (48) Clip 5

excited (adj.)	28
excitement (n.)	1
happy (adj.)	17
happiness (n.)	2

English Emotion Lemmas in the *excitement* narratives by the FL Learners CEFR B
Tokens (14) Clip 5

excited (adj.)	7
happy (adj.)	7

Appendix G2: Emotion lemmas in the *frustration* narratives

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Arabic Monolinguals
Tokens (20) Clip 1

mʿaṣṣib (adj.)	11
ʿaṣṣab (v.)	5
zaʿlān (adj.)	2
mitnarfiz (adj.)	1
ʾiḥbāṭ (n.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (57) Clip 1

mʿaṣṣib (adj.)	20
ʿaṣṣab (v.)	13
zaʿlān (adj.)	6
mitnarfiz (adj.)	7
mitḍāyiq (adj.)	6
ʾiḥbāṭ (n.)	3
muḥbaṭ (adj.)	2

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (52) Clip 1

mʿaṣṣib (adj.)	17
ʿaṣṣab (v.)	9
zaʿlān (adj.)	2
mitnarfiz (adj.)	6
mitḍāyiq (adj.)	11
yāʾis (adj.)	2
ʾiḥbāṭ (n.)	2
muḥbaṭ (adj.)	2
xaybat ʾamal (n.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (14) Clip 1

mʿaṣṣib (adj.)	5
ʿaṣṣab (v.)	2
zaʿlān (adj.)	1
mitnarfiz (adj.)	3
mitḍāyiq (adj.)	2
miktiʾib (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the English Native Speakers
Tokens (22) Clip 1

frustrated (adj.)	15
agitated (adj.)	2
angry (adj.)	3
annoyed (adj.)	2

English Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (52) Clip 1

frustrated (adj.)	30
frustration (n.)	2
agitated (adj.)	1
angry (adj.)	11
anger (n.)	3
disappointed (adj.)	2
upset (adj.)	2
sad (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (45) Clip 1

frustrated (adj.)	2
frustration (n.)	1
annoyed (adj.)	1
angry (adj.)	22
anger (n.)	1
disappointed (adj.)	5
upset (adj.)	5
sad (adj.)	6
depressed (adj.)	2

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (13) Clip 1

frustration (n.)	1
angry (adj.)	6
anger (n.)	1
disappointed (adj.)	1
sad (adj.)	4

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Arabic Monolinguals
Tokens (26) Clip 2

mʿaṣṣib (adj.)	14
ʿaṣṣab (v.)	7
mitḍāyiq (adj.)	3
mitnarfiz (adj.)	1
ʾiḥbāṭ (n.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (49) Clip 2

mʿaṣṣib (adj.)	27
ʿaṣṣab (v.)	10
mitnarfiz (adj.)	8
mitḍāyiq (adj.)	3
muḥbaṭ (adj.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (47) Clip 2

mʿaṣṣib (adj.)	21
ʿaṣṣab (v.)	15
mitnarfiz (adj.)	7
mitḍāyiq (adj.)	3
yāʾis (adj.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (15) Clip 2

mʿaṣṣib (adj.)	4
ʿaṣṣab (v.)	6
zaʿlān (adj.)	1
mitnarfiz (adj.)	3
mitḍāyiq (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the English Native Speakers Tokens (35) Clip 2

frustrated (adj.)	12
frustration (n.)	5
agitated (adj.)	1
angry (adj.)	10
anger (n.)	3
upset (adj.)	3
annoyed (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the Immersion Learners Tokens (61) Clip 2

frustrated (adj.)	21
frustration (n.)	5
angry (adj.)	18
anger (n.)	11
upset (adj.)	6

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C Tokens (52) Clip 2

frustrated (adj.)	4
frustration (n.)	1
annoyed (adj.)	1
angry (adj.)	31
anger (n.)	10
upset (adj.)	5

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B Tokens (13) Clip 2

frustrated (adj.)	1
angry (adj.)	10
anger (n.)	1
upset (adj.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Arabic Monolinguals
Tokens (19) Clip 3

ʿaṣṣab (v.)	1
mitḍāyiq (adj.)	3
zaʿlān (adj.)	2
zʿalat (v.)	3
yāʾis (adj.)	6
ʾiḥbāṭ (n.)	4

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (54) Clip 3

mʿaṣṣib (adj.)	6
ʿaṣṣab (v.)	4
mitnarfiz (adj.)	3
mitḍāyiq (adj.)	13
zaʿlān (adj.)	12
zʿalat (v.)	9
muḥbaṭ (adj.)	5
ʾiḥbāṭ (n.)	2

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (44) Clip 3

mʿaṣṣib (adj.)	2
mitnarfiz (adj.)	1
mitḍāyiq (adj.)	3
zaʿlān (adj.)	14
zʿalat (v.)	13
yāʾis (n.)	4
xaybat ʾamal (n.)	2
muḥbaṭ (adj.)	3
ʾiḥbāṭ (n.)	2

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (13) Clip 3

zaʿlān (adj.)	7
zʿalat (v.)	2
yāʾis (n.)	2
ʾiḥbāṭ (n.)	2

English Emotion Lemmas in the *frustration* narratives by the English Native Speakers Tokens (32) Clip 3

frustrated (adj.)	13
frustration (n.)	2
agitated (adj.)	2
annoyed (adj.)	2
sad (adj.)	2
upset (adj.)	8
disappointed (adj.)	3

English Emotion Lemmas in the *frustration* narratives by the Immersion Learners Tokens (45) Clip 3

frustrated (adj.)	20
frustration (n.)	1
angry (adj.)	1
annoyed (adj.)	1
sad (adj.)	16
upset (adj.)	3
disappointed (adj.)	3

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C Tokens (45) Clip 3

frustrated (adj.)	11
angry (adj.)	1
disappointed (adj.)	6
sad (adj.)	21
upset (adj.)	4
depressed (adj.)	2

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B Tokens (14) Clip 3

frustrated (adj.)	1
angry (adj.)	2
sad (adj.)	5
depressed (adj.)	4
disappointed (adj.)	2

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Arabic Monolinguals Tokens (24) Clip 4

mʿaṣṣib (adj.)	8
ʿaṣṣab (v.)	6
mitnarfiz (adj.)	2
mitḍāyiq (adj.)	5
yāʾis (adj.)	3

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Immersion Learners Tokens (53) Clip 4

mʿaṣṣib (adj.)	22
ʿaṣṣab (v.)	10
mitnarfiz (adj.)	11
mitḍāyiq (adj.)	6
zaʿlān (adj.)	4

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C Tokens (51) Clip 4

mʿaṣṣib (adj.)	23
ʿaṣṣab (v.)	8
mitnarfiz (adj.)	5
mitḍāyiq (adj.)	6
zaʿlān (adj.)	5
yāʾis (n.)	2
ʾiḥbāṭ (n.)	2

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B Tokens (11) Clip 4

mʿaṣṣib (adj.)	5
ʿaṣṣab (v.)	3
mitnarfiz (adj.)	1
mitḍāyiq (adj.)	1
yāʾis (n.)	1

English Emotion Lemmas in the *frustration* narratives by the English Native Speakers
Tokens (36) Clip 4

frustrated (adj.)	12
frustration (n.)	4
angry (adj.)	7
anger (n.)	1
agitated (adj.)	3
annoyed (adj.)	2
sad (adj.)	2
upset (adj.)	3
disappointed (adj.)	2

English Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (64) Clip 4

frustrated (adj.)	32
frustration (n.)	3
angry (adj.)	16
anger (n.)	5
annoyed (adj.)	1
sad (adj.)	3
upset (adj.)	3
disappointed (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (58) Clip 4

frustrated (adj.)	19
frustration (n.)	1
angry (adj.)	26
anger (n.)	2
annoyed (adj.)	1
sad (adj.)	3
upset (adj.)	1
depressed (adj.)	4

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (18) Clip 4

frustrated (adj.)	2
angry (adj.)	10
anger (n.)	2
sad (adj.)	3
upset (adj.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Arabic Monolinguals
Tokens (21) Clip 5

mʿaṣṣib (adj.)	10
ʿaṣṣab (v.)	5
mitnarfiz (adj.)	3
mitḍāyiq (adj.)	3
yāʾis (adj.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the Immersion Learners
Tokens (39) Clip 5

mʿaṣṣib (adj.)	16
ʿaṣṣab (v.)	8
mitnarfiz (adj.)	12
mitḍāyiq (adj.)	3

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C
Tokens (43) Clip 5

mʿaṣṣib (adj.)	19
ʿaṣṣab (v.)	9
mitnarfiz (adj.)	9
mitḍāyiq (adj.)	3
zaʿlān (adj.)	2
yāʾis (n.)	1

Kuwaiti Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B
Tokens (11) Clip 5

mʿaṣṣib (adj.)	6
ʿaṣṣab (v.)	4
mitḍāyiq (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the English Native Speakers Tokens (29) Clip 5

frustrated (adj.)	15
frustration (n.)	1
angry (adj.)	5
agitated (adj.)	7
annoyed (adj.)	1

English Emotion Lemmas in the *frustration* narratives by the Immersion Learners Tokens (42) Clip 5

frustrated (adj.)	27
angry (adj.)	10
anger (n.)	1
upset (adj.)	4

English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR C Tokens (38) Clip 5

frustrated (adj.)	6
angry (adj.)	28
annoyed (adj.)	3
upset (adj.)	1

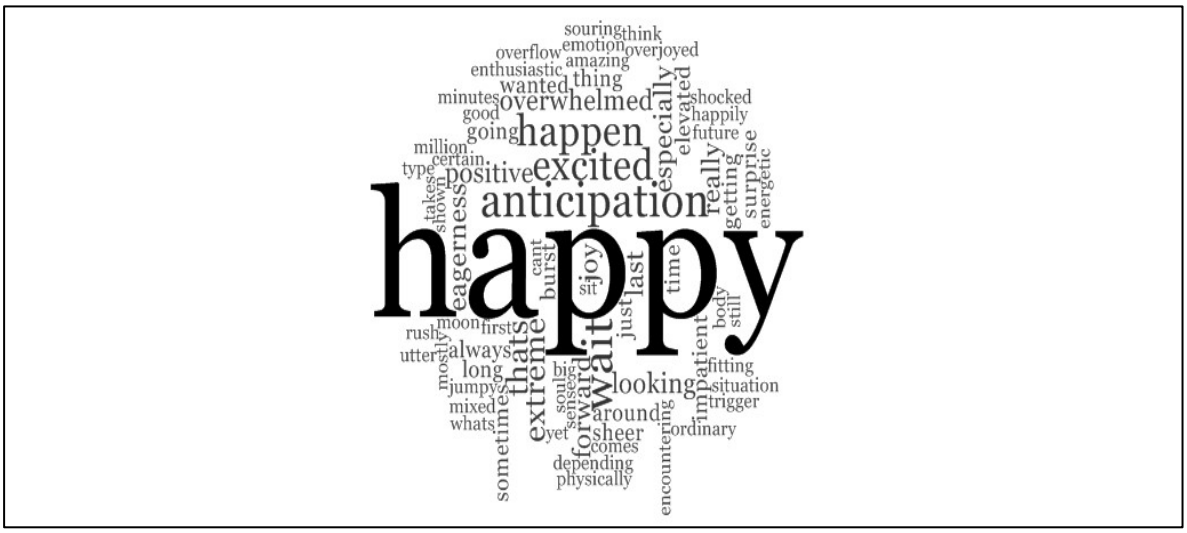
English Emotion Lemmas in the *frustration* narratives by the FL Learners CEFR B Tokens (10) Clip 5

angry (adj.)	9
upset (adj.)	1

Appendix H1: NVIvo word clouds - *excitement* emotionally

Native Speakers of English:

Immersion Learners:



FL learners CEFR C:

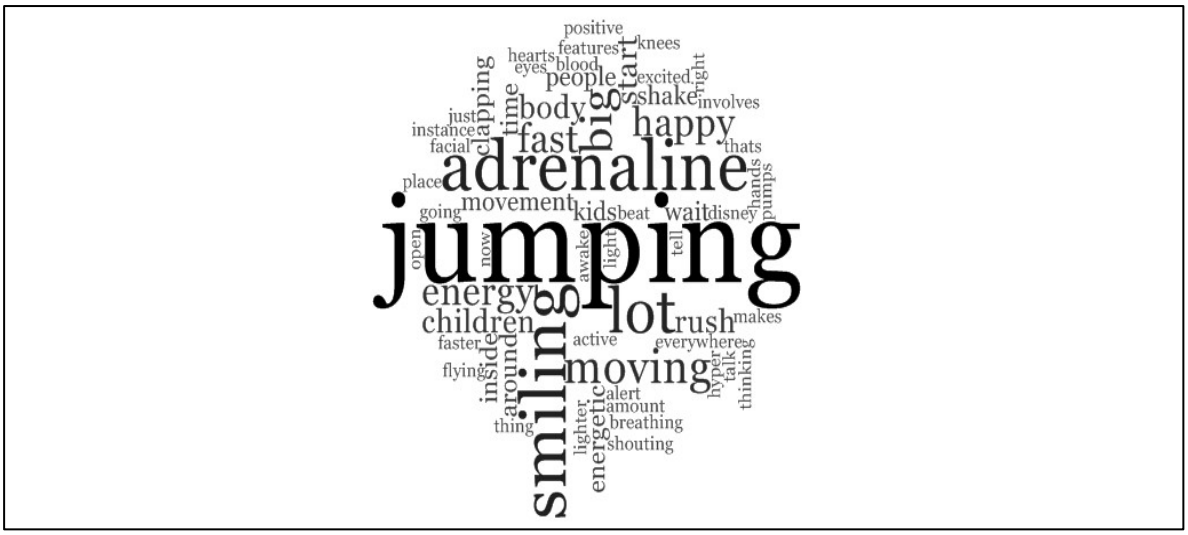
FL learners CEFR B:

Appendix H2: NVIvo word clouds - *excitement* physiologically

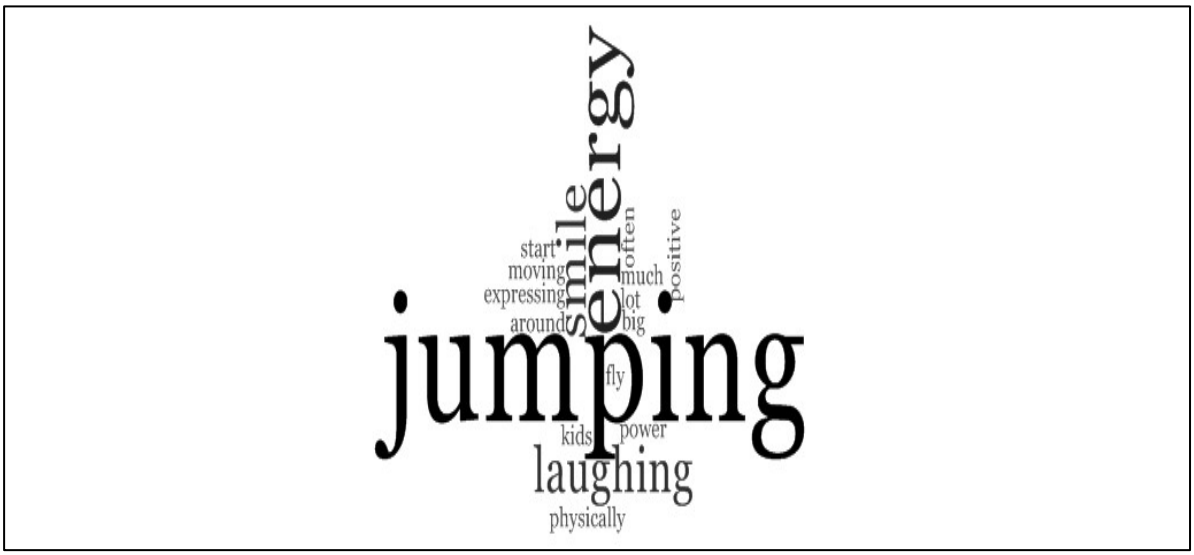
Native speakers of English:

Immersion Learners:

FL learners CEFR C:



FL learners CEFR B:



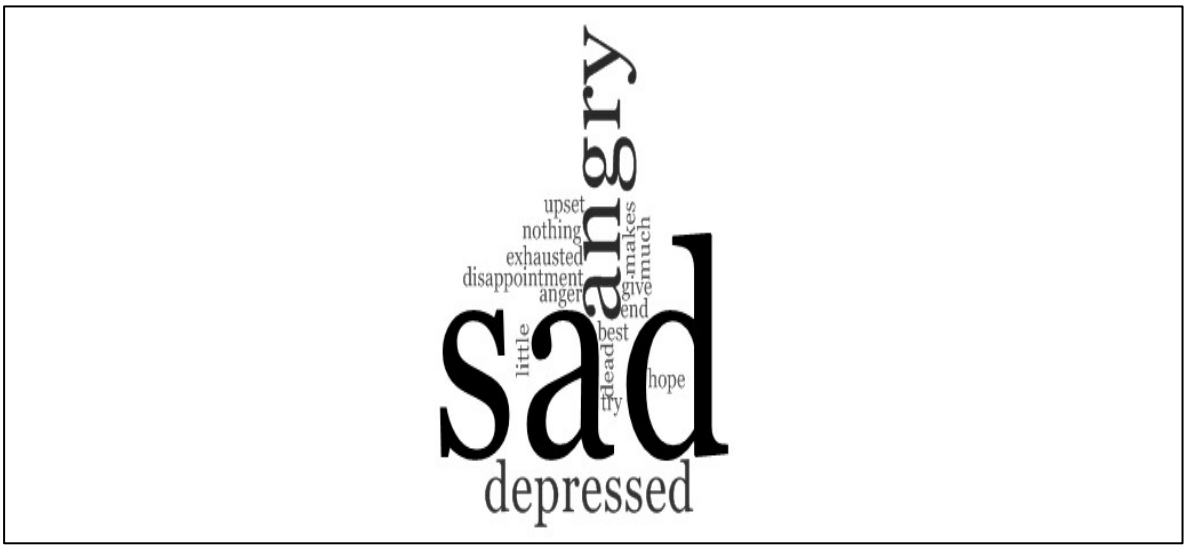
Appendix H3: NVIvo word clouds - *frustration* emotionally

Native Speakers of English:

Immersion Learners:

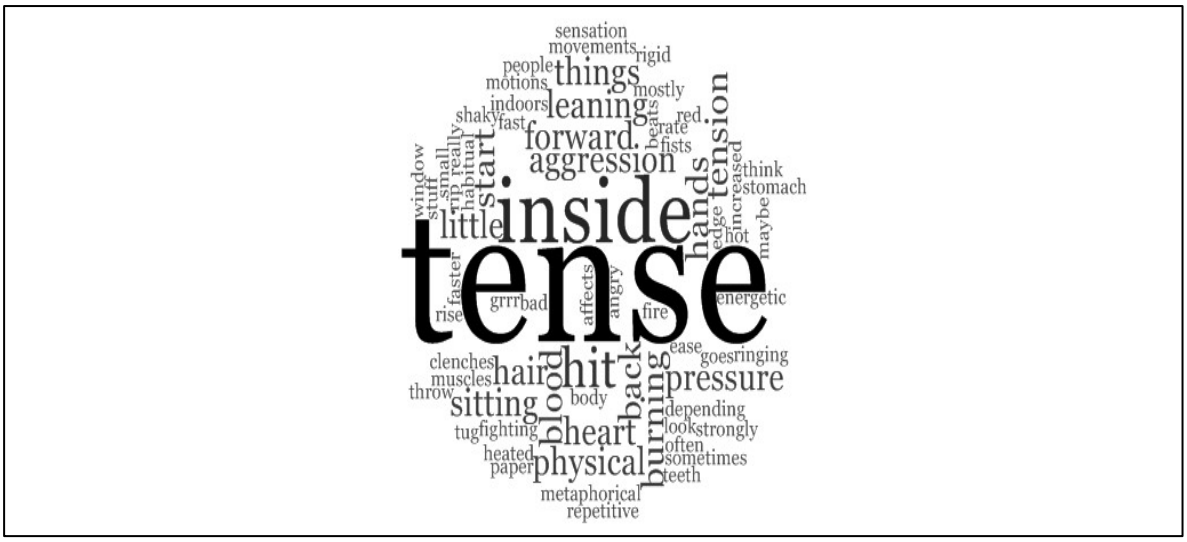
FL learners CEFR C:

FL learners CEFR B:



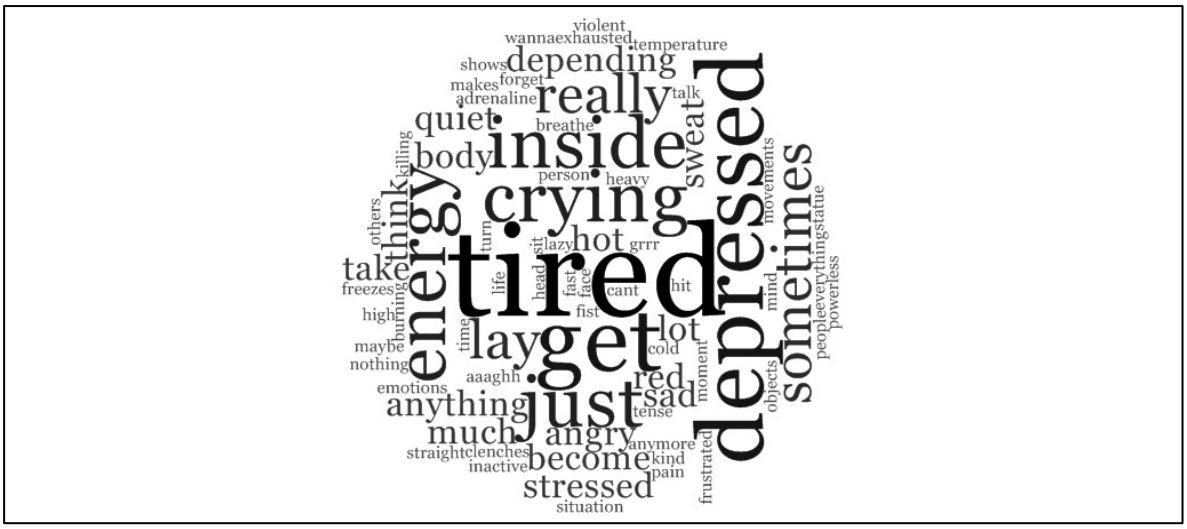
Appendix H4: NVIvo word clouds - *frustration* physiologically

Native Speakers of English:

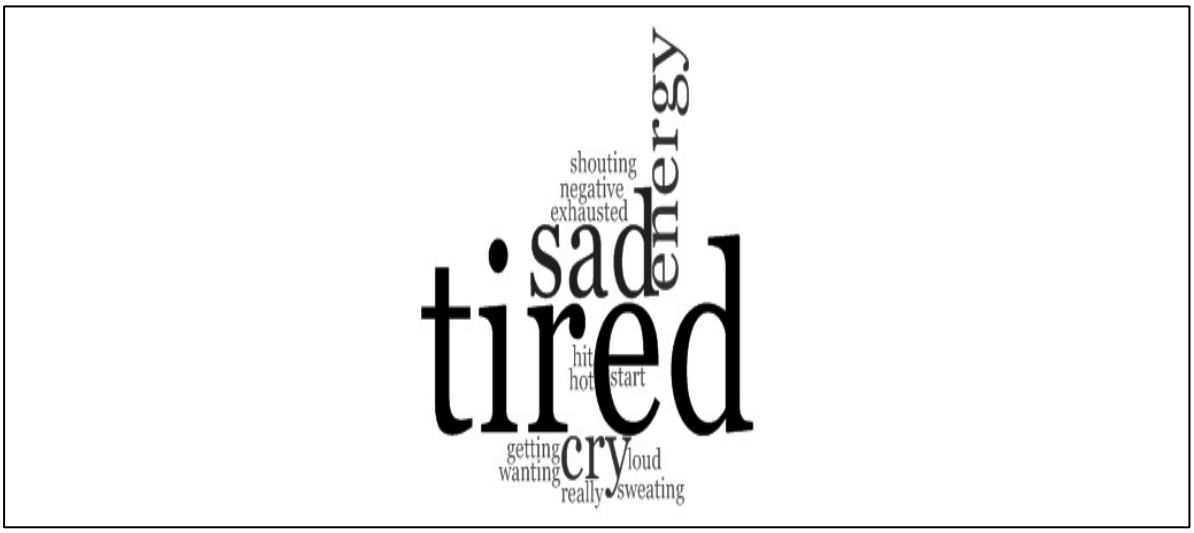


Immersion Learners:

FL learners CEFR C:



FL learners CEFR B:



The word *energy* here in this word cloud given by the FL learners CEFR B is preceded by the word 'no' but word frequency queries in NVIvo 10 do not count words such as 'no' in their word frequencies, as their answers included having *no energy*.